Geology Cumulative Subject Index
Volumes 1 - 6

absolute age *see also* geochronology; isotopes

absolute age—dates

amphibolite: Early Cretaceous basement rocks in Hispaniola
(Kesler, S. E., *et al.*) 5(4): 245-247

basalt: Tholeiitic basalt ridge in the Peru Trench
(Kulm, L. D., *et al.*) 1(1): 11-14

biotite: New K-Ar age determinations from the West African Shield in the Niger Republic
(Brunnschweiler, R. O.) 2(1): 17-20

blueschist: Blueschists of the Kodiak Islands, Alaska; an extension of the Seldovia schist terrane
(Carden, J. R., *et al.*) 5(9): 529-533

— Triassic blueschist from northern California and North-central Oregon
(Hotz, P. E., *et al.*) 5(11): 659-663

corals: Age and magnitude of the late Pleistocene sea-level rise on the eastern Yucatan Peninsula
(Szabo, B. J., *et al.*) 6(12): 713-715

diabase: The Palisades Sill; a Jurassic intrusion? Evidence from $^{40}Ar/^{39}$ Ar incremental release ages
(Dallmeyer, R. D.) 3(5): 243-245

glauconite: Rb-Sr glauconite isochron, Maestrichtian unit of Peedee Formation (Upper Cretaceous), North Carolina
(Harris, W. B.) 4(12): 761-762

gneisses: Evidence for basement of late Precambrian age in the Caledonides of western Ireland
(van Breemen, O., *et al.*) 4(8): 499-501

— Strontium isotopic evidence relating to the evolution of the lower Precambrian granitic crust in Swaziland
(Davies, R. D., *et al.*) 4(9): 553-556

granite: Isotopic evidence for crustal reworking in the Rhodesian Archean craton, southern Africa
(Hickman, M. H.) 6(4): 214-216

— Rb-Sr systematics in granite from central Nepal (Manaslu); significance of the Oligocene age and high $^{87}Sr/^{86}Sr$ ratio in Himalayan Orogeny
(Hamet, J., *et al.*) 4(8): 470-472

— Rb-Sr systematics in granite from central Nepal (Manaslu); significance of the Oligocene age and high $^{87}Sr/^{86}Sr$ ratio in Himalayan Orogeny
(Vidal, P., *et al.*) 6(4): 196-197

igneous rocks: Geochronology of Precambrian rocks in the St. Francois Mountains, southeastern Missouri; summary
(Bickford, M. E., *et al.*) 3(9): 537-540

— Radiometric age determinations from the Florida Mountains, New Mexico
(Brookins, D. G.) 2(11): 555-557

metamorphic rocks: Gneiss and migmatite of Archean age in the Precambrian basement of central Wisconsin
(Van Schmus, W. R., *et al.*) 5(1): 45-48

metaplutonic rocks: A Paleozoic age for some charnockitic-anorthositic rocks
(Foland, K. A., *et al.*) 6(3): 143-146

metasedimentary rocks: Radiometric dating of time of thrusting in the disturbed belt of Montana
(Hoffman, J., *et al.*) 4(1): 16-20

metavolcanic rocks: K-Ar ages from the Near Islands, western Aleutian Islands, Alaska; indication of a mid-Oligocene thermal event
(DeLong, S. E., *et al.*) 3(12): 691-694

moraines: Radiocarbon dating of the last glaciation in Peru
(Mercer, J. H., *et al.*) 5(10): 600-604

plutonic rocks: Nature and timing of movement on Hines Creek strand of Denali Fault system, Alaska
(Wahrhaftig, C., *et al.*) 3(8): 463-466

reefs: Thickest recorded Holocene reef section, Isla Perez core hole, Alacran Reef, Mexico
(Macintyre, I. G., *et al.*) 5(12): 749-754

rhyolite: K-Ar ages of Pleistocene rhyolitic volcanism in the Coso Range, California
(Lanphere, M. A., *et al.*) 3(6): 339-341

sand: Anatomy of a shoreface-connected sand ridge on the New Jersey shelf; implications for the genesis of the shelf surficial sand sheet
(Stahl, L., *et al.*) 2(3): 117-120

sediments: Late Quaternary sea-level changes, Gulf of Carpentaria, Australia
(Smart, J.) 5(12): 755-759

— Proposed extent of late Wisconsin Laurentide ice on eastern Baffin Island
(Miller, G. H., *et al.*) 2(3): 125-130

shells: Age of the South Bight II marine transgression at Amchitka Island, Aleutians
(Szabo, B. J., *et al.*) 3(8): 457-459

— Isostasy and eustasy of Hudson Bay
(Hillaire-Marcel, C., *et al.*) 6(2): 117-122

trachyte: Age of trachyte from Ross Island, Antarctica
(Forbes, R. B., *et al.*) 2(6): 297-298

tuff: Eureka Valley Tuff, East-central California and adjacent Nevada
(Noble, D. C., *et al.*) 2(3): 139-142

volcanic rocks: Episodic volcanism in the central Oregon Cascade Range
(McBirney, A. R., *et al.*) 2(12): 585-589

— Episodic volcanism in the central Oregon Cascade Range; confirmation and correlation with the Snake River plain; discussion
(Armstrong, R. L.) 3(7): 356-357

— Geomagnetic polarity event recorded at 1.1 m.y. on Cobb Mountain, Clear Lake volcanic field, California
(Mankinen, E. A., *et al.*) 6(11): 653-656

— K-Ar ages of Tahiti and Moorea, Society Islands, and implications for the hot-spot model
(Dymond, J.) 3(5): 236-240

— K-Ar ages of the volcanics in the Rattlesnake Hills, central Wyoming
(Pekarek, A. H., *et al.*) 2(6): 283-285

— Rates of Quaternary glacial erosion and corrie formation, Marie Byrd Land, Antarctic
(Andrews, J. T., *et al.*) 1(2): 75-80

— Sr-isotopic evidence for an old mantle source region for French Polynesian volcanism
(Duncan, R. A., *et al.*) 4(12): 728-732

zircon: Ages of zircons from the Bay of Islands ophiolite complex, western Newfoundland
(Mattinson, J. M.) 4(7): 393-394

— Early Paleozoic ophiolite complexes of Newfoundland; isotopic ages of zircons
(Mattinson, J. M.) 3(4): 181-183

— Early Paleozoic ophiolite complexes of Newfoundland; isotopic ages of zircons; discussion and reply
(Williams, H., *et al.*) 3(8): 479

— Early Paleozoic ophiolite complexes of Newfoundland; isotopic ages of zircons; discussion and reply
(Church, W. R., *et al.*) 4(1): 7-8

absolute age—interpretation

C-14: Uplifted turbidite basins on the seaward wall of the Peru Trench
(Prince, R. A., *et al.*) 2(12): 607-611

K/Ar: Radiometric dating of thrusting; discussion
(Hoffman, J., *et al.*) 2(11): 526

sedimentary rocks: Cretaceous phases of rapid sediment accumulation, continental shelf, eastern USA
(Whitten, E. H. T.) 4(4): 237-240

acoustical surveys *see under* geophysical surveys *under* Arctic Ocean; Bahamas; Mediterranean region; Mexico; Pacific Coast; Pacific Ocean; Taiwan

aeromagnetic surveys *see* magnetic surveys *under* geophysical surveys *under* Appalachians; Atlantic Coastal Plain; Basin and Range Province; Colorado Plateau; Indian Ocean; Wyoming

Africa *see also* Ethiopia; Kenya; Lesotho; Malagasy Republic; Morocco; Niger; Rhodesia; South Africa; South-West Africa; Swaziland

Africa—structural geology
tectonics: Paleorifting between the Gregory and Ethiopian rifts
(Cerling, T. E., *et al.*) 5(7): 441-444

Africa—tectonophysics
plate tectonics: Plate tectonics; assessments and reassessments; discussion and reply
(Mantura, A. J., *et al.*) 5(3): 191
— Western margin of Australia; a Mesozoic analog of the East African Rift system
(Veevers, J. J., *et al.*) 4(12): 713-717

Alabama—stratigraphy
Cambrian: Archaeocyathids in eastern Alabama; significance to geological interpretation of Coosa deformed belt
(Bearce, D. N., *et al.*) 5(8): 467-470

Alabama—structural geology
tectonics: Preliminary interpretation of aeromagnetic and aeroradioactivity maps of the Alabama Piedmont
(Neathery, T. L., *et al.*) 4(6): 375-381

Alaska—geochronology
Cretaceous: Nature and timing of movement on Hines Creek strand of Denali Fault system, Alaska
(Wahrhaftig, C., *et al.*) 3(8): 463-466
Jurassic: Blueschists of the Kodiak Islands, Alaska; an extension of the Seldovia schist terrane
(Carden, J. R., *et al.*) 5(9): 529-533
Oligocene: K-Ar ages from the Near Islands, western Aleutian Islands, Alaska; indication of a mid-Oligocene thermal event
(DeLong, S. E., *et al.*) 3(12): 691-694
Pleistocene: Age of the South Bight II marine transgression at Amchitka Island, Aleutians
(Szabo, B. J., *et al.*) 3(8): 457-459

Alaska—geomorphology
volcanic features: Spectacular mobility of ash flows around Aniakchak and Fisher calderas, Alaska
(Miller, T. P., *et al.*) 5(3): 173-176

Alaska—paleobotany
algae: Microbiota from the Late Proterozoic Tindir Group, Alaska
(Allison, C. W., *et al.*) 1(2): 65-68

Alaska—paleontology
worms: Primitive fossil flatworm from Alaska; new evidence bearing on ancestry of the Metazoa
(Allison, C. W.) 3(11): 649-652

Alaska—petrology
igneous rocks: Sheeted dikes, gabbro, and pillow basalt in flysch of coastal southern Alaska
(Tysdal, R. G., *et al.*) 5(6): 377-383

Alaska—sedimentary petrology
sedimentation: Analysis of microtextures on quartz sand grains from lower Cook Inlet, Alaska
(Hampton, M. A., *et al.*) 6(2): 105-110

Alaska—seismology
earthquakes: Post-earthquake dilatancy recovery; discussion
(Plafker, G.) 3(2): 68

Alaska—stratigraphy
Cretaceous: Upper Cretaceous arc-trench gap sedimentation on the Alaska Peninsula
(Mancini, E. A., *et al.*) 6(7): 437-439
Pleistocene: Interstadial mammoth remains and associated pollen and insect fossils, Kotzebue Sound area, northwestern Alaska
(Hopkins, D. M., *et al.*) 4(3): 169-172
Quaternary: Late Quaternary sedimentation in the active eastern Aleutian Trench
(Piper, D. J. W., *et al.*) 1(1): 19-22

Alaska—tectonophysics
plate tectonics: Orientation of underthrusting during latest Cretaceous and earliest Tertiary time, Kodiak Islands, Alaska
(Moore, J. C.) 6(4): 209-213
— Tectonic implications of a late Paleozoic volcanic arc in the Talkeetna Mountains, south-central Alaska
(Csejtey, B., Jr.) 4(1): 49-52

algae—Coccolithophoraceae
Cretaceous: The terminal Cretaceous event; a geologic problem with an oceanographic solution
(Gartner, S., *et al.*) 6(12): 708-712
Quaternary: Global synchroneity of late Quaternary coccolith datum levels; validation by oxygen isotopes
(Thierstein, H. R., *et al.*) 5(7): 400-404

algae—Cyanophyta
Proterozoic: Microbiota from the Late Proterozoic Tindir Group, Alaska
(Allison, C. W., *et al.*) 1(2): 65-68

algae—diatoms
Cenozoic: Silica, diatoms, and Cenozoic radiolarian evolution
(Harper, H. E., Jr., *et al.*) 3(4): 175-177
Miocene: Implications of late Neogene fresh-water sediment in the Sea of Japan
(Burckle, L. H., *et al.*) 6(2): 123-127
Pleistocene: Isochronous last-abundant-appearance datum (LAAD) of the diatom Hemidiscus karstenii in the Sub-Antarctic
(Burckle, L. H., *et al.*) 6(4): 243-246
Quaternary: Preservation of diatoms in glacial to Holocene deep-sea sediments of the equatorial Pacific
(Mikkelsen, N.) 6(9): 553-555

algae—nannofossils
Cretaceous: Mesozoic holococcoliths
(Wind, F. H., *et al.*) 6(3): 140-142
experimental studies: Effects of ultrasonic pressure on calcareous nannofossils
(Clak, D. F.) 1(2): 61-62
Neogene: Cenozoic magnetic time scale in deep-sea cores; completion of the Neogene
(Theyer, F., *et al.*) 2(10): 487-492

algae—occurrence
possibilities: Late Proterozoic microbiota of the Miette Group, southern British Columbia
(Javor, B. J., *et al.*) 4(2): 111-119

algae—Phaeophyta
Devonian: Occurrence of Foerstia (Protosalvinia) in Lincoln County, West Virginia
(Schwietering, J. F., *et al.*) 6(8): 493-494

algae—stromatolites
Proterozoic: Conophyton in the Bambui Group; what form and age?
(Cloud, P., *et al.*) 1(3): 127

Alps—petrology
metamorphism: Effects of metamorphism on quartz cathodoluminescence
(Sprunt, E. S., *et al.*) 6(5): 305-308
— Metamorphic P-T conditions and the geothermal gradients calculated from geophysical data
(Thompson, P. H.) 5(9): 520-522
— Metamorphic P-T distributions and the geothermal gradients calculated from geophysical data
(Ayrton, S., *et al.*) 6(8): 454-455
— On elongate olivine of metamorphic orgin
(Evans, B. W., *et al.*) 2(3): 131-132

Alps—structural geology
tectonics: Collision of irregular continental margins; implications for foreland deformation of alpine-type orogens
(Sengor, A. M. C.) 4(12): 779-782
— Finite-element model of a mountain massif; discussion and reply
(Goguel, J., *et al.*) 5(5): 260-261

Alps—tectonophysics
plate tectonics: Evolution of the Eastern Alps; a plate tectonics working hypothesis
(Dietrich, V.) 4(3): 147-152

amino acids *see* amino acids *under* organic materials

Andes—geochronology
Pleistocene: Radiometric evidence for pre-Wisconsin glaciation in the northern Andes
(Herd, D. G., *et al.*) 2(12): 603-604
— Radiometric evidence for pre-Wisconsin glaciation in the northern Andes; discussion
(Garner, H. F.) 3(5): 230-231

Andes—petrology
magmas: Chemical and isotopic constraints on the origin of low-silica latite and andesite from the Andes of central Peru
(Noble, D. C., *et al.*) 3(9): 501-504

Andes—tectonophysics
plate tectonics: Metamorphic petrology of the Sarmiento ophiolite complex, Chile
(Elthon, D., *et al.*) 6(8): 464-468
— Plate-tectonic model for southern Antarctic Peninsula and its relation to southern Andes
(Suarez, M.) 4(4): 211-214
— Relationship between depth to Benioff zone and K and Sr concentrations in volcanic rocks of Chile
(Palacios M., C., *et al.*) 3(10): 595-596

andesite *see under* andesite-rhyolite family *under* igneous rocks

Annelida—occurrence
possibilities: Possible sprigginid worm and a new trace fossil from the Nama Group, South West Africa
(Germs, G. J. B.) 1(2): 69-70

Antarctic—areal geology
McMurdo Sound: Antarctic geologic history investigated by diamond drilling
(Mudrey, M. G., Jr., *et al.*) 2(6): 291-294

Antarctic—volcanology
Mount Erebus: Present volcanic activity on Mount Erebus, Ross Island, Antarctica
(Giggenbach, W. F., *et al.*) 1(3): 135-136

Antarctic Ocean—stratigraphy
Pleistocene: Isochronous last-abundant-appearance datum (LAAD) of the diatom Hemidiscus karstenii in the Sub-Antarctic
(Burckle, L. H., *et al.*) 6(4): 243-246
Pliocene: Early Pliocene temperature changes in the Antarctic seas
(Ciesielski, P. F., *et al.*) 2(10): 511-515

Antarctica—geochronology
Quaternary: Age of trachyte from Ross Island, Antarctica
(Forbes, R. B., *et al.*) 2(6): 297-298

Antarctica—geomorphology
glacial geology: Rates of Quaternary glacial erosion and corrie formation, Marie Byrd Land, Antarctic
(Andrews, J. T., *et al.*) 1(2): 75-80

Antarctica—mineralogy
halides: Halite and hydrohalite from Lake Bonney, Taylor Valley, Antarctica
(Craig, J. R., *et al.*) 2(8): 389-390

Antarctica—tectonophysics
plate tectonics: Plate-tectonic model for southern Antarctic Peninsula and its relation to southern Andes
(Suarez, M.) 4(4): 211-214

Anthozoa *see under* Coelenterata

Apennines—sedimentary petrology
sedimentary structures: Classification of solution cleavage in pelagic limestones
(Alvarez, W., *et al.*) 6(5): 263-266

Appalachians—economic geology
coal: Estimation of coal-cleat orientation using surface-joint and photolinear analysis
(Diamond, W. P., *et al.*) 3(12): 687-690

Appalachians—geomorphology
glacial geology: Composition sorting of topographically high Tennessee River gravels; a glacial hypothesis
(Kaye, J. M.) 2(1): 45-47
— Compositional sorting of topographically high Tennessee River gravels; a glacial hypothesis; discussion and reply
(McSaveney, E. R., *et al.*) 2(6): 281-282

Appalachians—geophysical surveys
magnetic surveys: Aeromagnetic discovery of a Baltimore gneiss dome in the piedmont of northwestern Delaware and southeastern Pennsylvania
(Higgins, M. W., *et al.*) 1(1): 41-43
surveys: Preliminary interpretation of aeromagnetic and aeroradioactivity maps of the Alabama Piedmont
(Neathery, T. L., *et al.*) 4(6): 375-381

Appalachians—petrology
intrusions: Mill Creek Dome revisited
(Higgins, M. W., *et al.*) 2(1): 28

Appalachians—stratigraphy
Cambrian: Archaeocyatha from New Jersey; evidence for an intra-Cambrian unconformity in the North-central Appalachians
(Palmer, A. R., *et al.*) 4(12): 773-774
— Correlation between Cambrian rocks of the southern Appalachian Geosyncline and the interior low plateaus
(Kidd, J. T., *et al.*) 4(12): 767-769

Appalachians—structural geology
tectonics: Archaeocyathids in eastern Alabama; significance to geological interpretation of Coosa deformed belt
(Bearce, D. N., *et al.*) 5(8): 467-470
— Plate tectonics models for the Ouachita Foldbelt; discussion and replies
(Cebull, S. E., *et al.*) 4(10): 636-638
— Second Penrose Field Conference; the Brevard zone
(Hatcher, R. D., Jr.) 3(3): 149-152
— The New York-Alabama Lineament; geophysical evidence for a major crustal break in the basement beneath the Appalachian Basin
(King, E. R., *et al.*) 6(5): 312-318
— The New York-Alabama Lineament; geophysical evidence for a major crustal break in the basement beneath the Appalachian Basin
(Barton, R. H.) 6(9): 575

Appalachians—tectonophysics
plate tectonics: Ages of zircons from the Bay of Islands ophiolite complex, western Newfoundland
(Mattinson, J. M.) 4(7): 393-394
— Ages of zircons from the Bay of Islands ophiolite complex, western Newfoundland; discussion
(Church, W. R.) 4(10): 623-625
— Do some eastern Appalachian ultramafic rocks represent mantle diapirs produced above a subduction zone?
(Stevens, R. K., *et al.*) 2(4): 175-178
— Lat 40°N fault zone, Pennsylvania; a new interpretation
(Root, S. I., *et al.*) 5(12): 719-723

aquifers *see* aquifers *under* ground water

Arabian Peninsula *see also* Oman

Arabian Peninsula—tectonophysics
sea-floor spreading: Mineralized fault zone parallel to the Oman ophiolite spreading axis
(Smewing, J. D., *et al.*) 5(9): 534-538

Archaeocyatha—biostratigraphy
Cambrian: Archaeocyathids in eastern Alabama; significance to geological interpretation of Coosa deformed belt
(Bearce, D. N., *et al.*) 5(8): 467-470
unconformities: Archaeocyatha from New Jersey; evidence for an intra-Cambrian unconformity in the North-central Appalachians
(Palmer, A. R., *et al.*) 4(12): 773-774

Archean *see also under* geochronology *under* Rhodesia; Swaziland; Wisconsin

Archean—petrology
greenstone belts: Experimental demonstration of the existence of peridotitic liquids in earliest Archean magmatism
(Green, D. H., *et al.*) 3(1): 11-14
— Genesis of Archean peridotitic magmas and constraints on Archean geothermal gradients and tectonics
(Green, D. H.) 3(1): 15-18
metamorphic rocks: Earliest Precambrian ultramafic-mafic volcanic rocks; ancient oceanic crust of relic terrestrial maria?
(Glikson, A. Y.) 4(4): 201-205
— Earliest Precambrian ultramafic-mafic volcanic rocks; ancient oceanic crust or relic terrestrial maria?; discussion (The chicken or the egg) and reply (Vestiges of a beginning)
(Bickle, M. J., *et al.*) 5(2): 68-71
— Generation of trondhjemitic-tonalitic liquids and Archean bimodal trondhjemite-basalt suites
(Barker, F., *et al.*) 4(10): 596-600

archeology *see* archaeology *under* stratigraphy *under* symposia

Arctic Ocean—geophysical surveys
acoustical surveys: Ice gouge recurrence and rates of sediment reworking, Beaufort Sea, Alaska
(Reimnitz, E., *et al.*) 5(7): 405-408

Arctic Ocean—oceanography
ocean basins: Plate tectonics model for the evolution of the Arctic
(Herron, E. M., *et al.*) 2(8): 377-380

Arctic Ocean—stratigraphy
changes of level: Displacement of Yukon-derived sediment from Bering Sea to Chukchi Sea during Holocene time
(Nelson, H., *et al.*) 5(3): 141-146
Cretaceous: Late Mesozoic and early Cenozoic sediment cores from the Arctic Ocean
(Clark, D. L.) 2(1): 41-44
Paleogene: Late Mesozoic and early Cenozoic sediment cores from the Arctic Ocean
(Clark, D. L.) 2(1): 41-44
Quaternary: Arctic Ocean foraminifera abundance and its relationship to equatorial Pacific Ocean solution cycles
(Larson, J. A.) 3(9): 491-492

Arctic Ocean—tectonophysics
sea-floor spreading: Plate tectonics model for the evolution of the Arctic
(Herron, E. M., *et al.*) 2(8): 377-380

Arctic region *see also* Greenland

Arctic region—geochronology
Quaternary: Comparison of the glacial chronology of eastern Baffin Island, East Greenland, and the Camp Century accumulation record
(Andrews, J. T., *et al.*) 2(7): 355-358
— Glacial chronology of Baffin Island, East Greenland, and Camp Century; discussion and reply
(Funder, S., *et al.*) 2(11): 522

Arctic region—stratigraphy
Holocene: Greenland's rapid postglacial emergence; a result of ice-water gravitational attraction
(Clark, J. A.) 4(5): 310-312
— Greenland's rapid postglacial emergence; a result of ice-water gravitational attraction; discussion and reply
(Tapscott, C., *et al.*) 4(8): 452-454
— Greenland's rapid postglacial emergence; a result of ice-water gravitational attraction; discussion and reply
(Tanner, W. F., *et al.*) 4(12): 797-798

Arctic region—tectonophysics
plate tectonics: Plate tectonics model for the evolution of the Arctic
(Herron, E. M., *et al.*) 2(8): 377-380

Arizona—geochemistry
isotopes: $^{87}Sr/^{86}Sr$ ratios in some volcanic rocks and some semifused inclusions of the San Francisco volcanic field
(Pushkar, P., *et al.*) 3(11): 669-671

Arizona—structural geology
isostasy: Finite-element model for possible isostatic rebound in the Grand Canyon
(Sturgul, J. R., *et al.*) 3(4): 169-171

Arkansas—stratigraphy
Ordovician: Shallow-marine origin for Ordovician rocks of the Ouachita Mountains, Arkansas
(Davies, D. K., *et al.*) 4(6): 340-344

Arkansas—tectonophysics
plate tectonics: Plate tectonics models for the Ouachita Foldbelt
(Wickham, J. S., *et al.*) 4(3): 173-176
— Plate tectonics models for the Ouachita Foldbelt; discussion and replies
(Cebull, S. E., *et al.*) 4(10): 636-638

Asia *see also* Arabian Peninsula; China; Far East; Himalayas; India; Indonesia; Iran; Japan; Malay Archipelago; Nepal; Pakistan; Philippine Islands; Taiwan

Asia—seismology
earthquakes: Spatial distribution and focal mechanisms of mantle earthquakes in the Hindu Kush-Pamir region; a contorted Benioff zone
(Billington, S., *et al.*) 5(11): 699-704

Asia—tectonophysics
plate tectonics: Relation of the tectonics of eastern China to the India-Eurasia collision; application of slip-line field theory to large-scale continental tectonics
(Molnar, P., *et al.*) 5(4): 212-216
— Spatial distribution and focal mechanisms of mantle earthquakes in the Hindu Kush-Pamir region; a contorted Benioff zone
(Billington, S., *et al.*) 5(11): 699-704

associations—general
IUGS: IUGS classification of granitic rocks; a critique
(Lyons, P. C.) 4(7): 425-426
— IUGS classification of granitic rocks; a critique; discussion
(Brooks, E. R.) 5(11): 653-654
— IUGS classification of granitic rocks; a critique; discussion and reply
(Bateman, P. C.) 5(4): 252-255

associations—stratigraphy
INQUA: Special report; INQUA in New Zealand
(Fairbridge, R. W.) 2(10): 505-506

Atlantic Coastal Plain—environmental geology
geologic hazards: Impact of Hurricane Belle on Assateague Island washover
(Fisher, J. S., *et al.*) 5(12): 765-768

Atlantic Coastal Plain—geochronology
Cretaceous: Cretaceous phases of rapid sediment accumulation, continental shelf, eastern USA
(Whitten, E. H. T.) 4(4): 237-240

Atlantic Coastal Plain—geophysical surveys
magnetic surveys: Interpretation of aeromagnetic anomalies bearing on the origin of upper Chesapeake Bay and river course changes in the central Atlantic seaboard region; speculations
(Higgins, M. W., *et al.*) 2(2): 73-76
— Interpretation of Chesapeake Bay aeromagnetic anomalies; discussion and reply
(Hansen, H. J.) 2(9): 449-450

Atlantic Coastal Plain—oceanography
sedimentation: Suspended-matter distribution in the New York Bight apex related to Hurricane Belle
(Young, R. A.) 6(5): 301-304

Atlantic Coastal Plain—stratigraphy
Pleistocene: Late Quaternary sea-level curve; reinterpretation based on glaciotectonic influence
(Dillon, W. P., *et al.*) 6(1): 56-60

Atlantic Coastal Plain—structural geology
isostasy: Late Quaternary sea-level curve; reinterpretation based on glaciotectonic influence
(Dillon, W. P., *et al.*) 6(1): 56-60
neotectonics: Correlation of tectonically deformed shorelines on the southern Atlantic Coastal Plain
(Winker, C. D., *et al.*) 5(2): 123-127

— Late Quaternary sea-level curve; reinterpretation based on glaciotectonic influence
(Dillon, W. P., *et al.*) 6(1): 56-60
tectonics: Belair fault zone; evidence of Tertiary fault displacement in eastern Georgia
(Prowell, D. C., *et al.*) 6(11): 681-684
Atlantic Ocean *see also* English Channel; Iceland; North Sea
Atlantic Ocean—geochemistry
nodules: Magnetic spherules from the Mid-Atlantic Ridge
(Aumento, F., *et al.*) 3(7): 407-410
Atlantic Ocean—geophysical surveys
seismic surveys: Fine-scale seismic stratigraphy in the western North Atlantic
(Shipley, T. H., *et al.*) 6(10): 635-639
— IPOD-USGS multichannel seismic reflection profile from Cape Hatteras to the Mid-Atlantic Ridge
(Grow, J. A., *et al.*) 5(10): 625-630
— Late Quaternary sea-level curve; reinterpretation based on glaciotectonic influence
(Dillon, W. P., *et al.*) 6(1): 56-60
— Structure of the western Blake-Bahama Basin as shown by 24-channel CDP profiling
(Dillon, W. P., *et al.*) 4(8): 459-462
surveys: Near-bottom geophysical study of the Mid-Atlantic Ridge median valley near lat 37°N; preliminary observations
(Macdonald, K. C., *et al.*) 3(4): 211-215
Atlantic Ocean—oceanography
continental shelf: Anthropogenic filling of the Hudson River (shelf) channel
(Williams, S. J.) 3(10): 597-600
ocean circulation: Amazon River sediment transport in the Atlantic Ocean
(Gibbs, R. J.) 4(1): 45-48
— Nodal tidal cycle of 18.6 yr.; its importance in sea-level curves of the East Coast of the United States and its value in explaining long-term sea-level changes
(Kaye, C. A., *et al.*) 1(3): 141-144
ocean floors: Abyssal furrows and hyperbolic echo traces on the Bahama outer ridge
(Hollister, C. D., *et al.*) 2(8): 395-400
— Duration of hydrothermal activity at an oceanic spreading center, Mid-Atlantic Ridge (lat 26°N)
(Scott, R. B., *et al.*) 4(4): 233-236
— FAMOUS; a plate tectonics study of the genesis of the lithosphere
(Heirtzler, J. R., *et al.*) 2(6): 273-274
— IPOD-USGS multichannel seismic reflection profile from Cape Hatteras to the Mid-Atlantic Ridge
(Grow, J. A., *et al.*) 5(10): 625-630
— Near-bottom geophysical study of the Mid-Atlantic Ridge median valley near lat 37°N; preliminary observations
(Macdonald, K. C., *et al.*) 3(4): 211-215
— New evidence for occurrence of debris flow deposits in the deep sea
(Embley, R. W.) 4(6): 371-374
— Preliminary model for extrusion and rifting at the axis of the Mid-Atlantic Ridge, 36°48′ north
(Moore, J. G., *et al.*) 2(9): 437-440
— Submarine meandering thalweg and turbidity currents flowing for 4,000 km in the Northwest Atlantic Mid-Ocean Channel, Labrador Sea
(Chough, S., *et al.*) 4(9): 529-533
— Vema fracture zone transform fault
(Eittreim, S., *et al.*) 3(10): 555-558
reefs: Lithoherms in the Straits of Florida
(Neumann, A. C., *et al.*) 5(1): 4-10
sea water: Dissolution of aragonite, Mg-calcite, and calcite in the North Atlantic Ocean
(Milliman, J. D.) 3(8): 461-462
sedimentation: Anatomy of a shoreface-connected sand ridge on the New Jersey shelf; implications for the genesis of the shelf surficial sand sheet
(Stahl, L., *et al.*) 2(3): 117-120
Atlantic Ocean—paleobotany
palynomorphs: Foraminiferal affinities exhibited by the dinoflagellate Nannoceratopsis Deflandre; discussion
(Evitt, W. R.) 2(12): 582-583
— Foraminiferal affinities exhibited by the dinoflagellate Nannoceratopsis Deflandre; with discussion
(Haskell, T. R.) 2(12): 579-582
Atlantic Ocean—stratigraphy
continental drift: A precocious Atlantic reconstruction; an historical note
(Van Houten, F. B.) 3(4): 194-195
— Atlantic evaporites formed by evaporation of water spilled from Pacific, Tethyan, and Southern oceans
(Burke, K.) 3(11): 613-616
— Sub-Cenozoic geology of the British continental margin (lat 50°N to 57°N) and the reassembly of the North Atlantic late Paleozoic supercontinent
(Bailey, R. J.) 3(10): 591-594
Pleistocene: Extension of the radiolarian Stylatractus universus as a biostratigraphic datum to the Atlantic Ocean
(Morley, J. J., *et al.*) 6(5): 309-311
Atlantic Ocean—structural geology
tectonics: Conceptual model for the block-fault origin of the North American Atlantic continental margin geosyncline
(Sheridan, R. E.) 2(9): 465-468
Atlantic Ocean—tectonophysics
plate tectonics: FAMOUS; a plate tectonics study of the genesis of the lithosphere
(Heirtzler, J. R., *et al.*) 2(6): 273-274
— Mesozoic epeirogeny at the South Atlantic margin and the Tristan hot spot
(Neill, W. M.) 4(8): 495-498
— Preliminary model for extrusion and rifting at the axis of the Mid-Atlantic Ridge, 36°48′ north
(Moore, J. G., *et al.*) 2(9): 437-440
— Vema fracture zone transform fault
(Eittreim, S., *et al.*) 3(10): 555-558
sea-floor spreading: Duration of hydrothermal activity at an oceanic spreading center, Mid-Atlantic Ridge (lat 26°N)
(Scott, R. B., *et al.*) 4(4): 233-236
— Spreading center terms and concepts
(Luyendyk, B. P., *et al.*) 4(6): 369-370
Atlantic region—stratigraphy
biogeography: Significance of fossiliferous Middle Cambrian rocks of Rhode Island to the history of the Avalonian microcontinent
(Skehan, J. W., *et al.*) 6(11): 694-698
Paleozoic: A precocious Atlantic reconstruction; an historical note
(Van Houten, F. B.) 3(4): 194-195
Atlantic region—structural geology
neotectonics: Greenland's rapid postglacial emergence; a result of ice-water gravitational attraction; discussion and reply
(Tapscott, C., *et al.*) 4(8): 452-454
tectonics: Mesozoic epeirogeny at the South Atlantic margin and the Tristan hot spot
(Neill, W. M.) 4(8): 495-498
Atlantic region—tectonophysics
plate tectonics: Continental collisions in the Appalachian-Caledonian orogenic belt; variations related to complete and incomplete suturing
(Dewey, J. F., *et al.*) 2(11): 543-546
— Jurassic sedimentation in the High Atlas Mountains of Morocco during early rifting of Africa and North America
(Evans, I., *et al.*) 2(6): 295-296
— Sub-Cenozoic geology of the British continental margin (lat 50°N to 57°N) and the reassembly of the North Atlantic late Paleozoic supercontinent
(Bailey, R. J.) 3(10): 591-594
atmosphere—circulation
evolution: Distant source of 1976 dustfall in Illinois and Pleistocene weather models
(Van Heuklon, T. K.) 5(11): 693-695

Australasia *see also* New Zealand; Papua New Guinea

Australia *see also* New South Wales; Northern Territory; Queensland; South Australia; Western Australia

Australia—geochemistry
isotopes: Metamorphic alteration of carbon isotopic composition in ancient sedimentary organic matter; new evidence from Australia and South Africa
(McKirdy, D. M., *et al.*) 2(12): 591-595

Australia—stratigraphy
changes of level: Late Quaternary sea-level changes, Gulf of Carpentaria, Australia
(Smart, J.) 5(12): 755-759

Australia—tectonophysics
plate tectonics: Early Cretaceous breakup of Gondwanaland off Western Australia
(Larson, R. L.) 5(1): 57-60

automatic data processing—environmental geology
maps: Practical use of geologic information by planners
(Van Driel, J. N.) 6(10): 592-596

automatic data processing—general
objectives: More on a clearinghouse for computer programs; letter
(Merriam, D. F.) 3(3): 100

automatic data processing—geochemistry
graphic display: A computer-assisted graphical method for identification and correlation of igneous rock chemistries
(Wright, T. L., *et al.*) 6(1): 16-20

automatic data processing—geophysical surveys
remote sensing: Simulated "true color" images from ERTS data
(Eliason, E. M., *et al.*) 2(5): 231-234
— Simulated "true color" images from ERTS data; comment
(Sales, J. K.) 2(10): 496

automatic data processing—sedimentary petrology
graphic display: Grain-size distribution within glacial varves
(Peach, P. A., *et al.*) 3(1): 43-46

bacteria—occurrence
possibilities: Late Proterozoic microbiota of the Miette Group, southern British Columbia
(Javor, B. J., *et al.*) 4(2): 111-119

Bahamas—geophysical surveys
acoustical surveys: Abyssal furrows and hyperbolic echo traces on the Bahama outer ridge
(Hollister, C. D., *et al.*) 2(8): 395-400

Bahamas—sedimentary petrology
reefs: Submarine recrystallization of a coral skeleton in a Holocene Bahamian reef
(Scherer, M.) 2(10): 499-500

Barbados—stratigraphy
Pleistocene: Carbon and oxygen isotopes as diagenetic and stratigraphic tools; surface and subsurface data, Barbados, West Indies
(Allan, J. R., *et al.*) 5(1): 16-20

basalt *see* basalt *under* basalt family *under* igneous rocks

Basin and Range Province—geophysical surveys
magnetic surveys: Aeromagnetics and the transition between the Colorado Plateau and basin range provinces
(Shuey, R. T., *et al.*) 1(3): 107-110

Basin and Range Province—tectonophysics
plate tectonics: Basin and range rifting in northern Nevada; clues from a mid-Miocene rift and its subsequent offsets
(Zoback, M. L., *et al.*) 6(2): 111-116

batholiths *see* batholiths *under* intrusions

Belize—oceanography
reefs: Submarine botryoidal aragonite in Holocene reef limestones, Belize
(Ginsburg, R. N., *et al.*) 4(7): 431-436

Bering Sea—stratigraphy
Holocene: Displacement of Yukon-derived sediment from Bering Sea to Chukchi Sea during Holocene time
(Nelson, H., *et al.*) 5(3): 141-146

bibliography—geochemistry
pressure solution: Early theories and hypotheses on pressure-solution-redeposition
(Durney, D. W.) 6(6): 369-372

biogeography *see also under* paleontology *under* Western U.S.; *see also under* stratigraphy *under* Atlantic region; Central America; Maritime Provinces; North America

biogeography—foraminifera
Cenozoic: Geologic significance of coiling direction in the planktonic foraminifera Pulleniatina
(Saito, T.) 4(5): 305-309

biogeography—Invertebrata
Phanerozoic: Why "communities"?; with discussion
(Watkins, R., *et al.*) 1(2): 55-60

biography *see also* bibliography

biography—general
Condon, Thomas: Horse genealogy; the Oregon connection
(Drake, E. T.) 6(10): 587-591

Brachiopoda—paleoecology
habitat: The depths inhabited by Silurian brachiopod communities; discussion and reply
(Shabica, S. V., *et al.*) 4(3): 132,187-191
— The depths inhabited by Silurian brachiopod communities; discussion and reply
(Hurst, J. M., *et al.*) 4(12): 709-712

Brazil—paleobotany
algae: Conophyton in the Bambui Group; what form and age?
(Cloud, P., *et al.*) 1(3): 127

brines *see also* bromine

British Columbia—stratigraphy
Proterozoic: Late Proterozoic microbiota of the Miette Group, southern British Columbia
(Javor, B. J., *et al.*) 4(2): 111-119

British Columbia—tectonophysics
plate tectonics: Oceanic crust and arc-trench gap tectonics in southwestern British Columbia
(Anderson, P.) 4(7): 443-446
— Oceanic crust and arc-trench gap tectonics in southwestern British Columbia; discussion and reply
(Cole, M. R., *et al.*) 5(6): 325-329

bromine—abundance
halite: Bromine content of Mediterranean halite
(Kuhn, R., *et al.*) 2(5): 213-216
— Bromine content of Mediterranean halite; discussion and reply
(Kendall, A. C., *et al.*) 2(11): 524-526

calcite *see* calcite *under* carbonates *under* minerals

California—economic geology
geothermal energy: Depressions surrounding volcanic fields; a reflection of underlying batholiths?
(Heiken, G.) 4(9): 568-572
— Geothermal prospecting in The Geysers-Clear Lake area, northern California
(Goff, F. E., *et al.*) 5(8): 509-515

California—engineering geology
slope stability: Earthflows in Franciscan melange, Van Duzen River basin, California
(Kelsey, H. M.) 6(6): 361-364
— Preparation and use of isopleth maps of landslide deposits
(Wright, R. H., *et al.*) 2(10): 483-485
waterways: Channel responses to artificial stream capture, Death Valley, California
(Dzurisin, D.) 3(6): 309-312

California—environmental geology
land use: Origin of Mojave Desert dust plumes photographed from space
(Nakata, J. K., *et al.*) 4(11): 644-648

California—geochemistry
organic materials: Methane production and consumption in anoxic marine sediments
(Barnes, R. O., *et al.*) 4(5): 297-300

plutonic rocks: Plutonic zones in the Peninsular Ranges of southern California and northern Baja California; discussion and reply
(Baird, A. K., *et al.*) 3(12): 676-677
trace elements: Chemical trends across Cretaceous batholithic rocks of southern California
(Baird, A. K., *et al.*) 2(10): 493-495
— Fractionation of rare-earth elements in the Tuolumne Intrusive Series, Sierra Nevada Batholith, California
(Frey, F. A., *et al.*) 6(4): 239-242

California—geochronology
Miocene: Eureka Valley Tuff, East-central California and adjacent Nevada
(Noble, D. C., *et al.*) 2(3): 139-142
Pleistocene: Age of the Bishop Tuff of eastern California as determined by the fission-track method
(Izett, G. A., *et al.*) 4(10): 587-590
— Geomagnetic polarity event recorded at 1.1 m.y. on Cobb Mountain, Clear Lake volcanic field, California
(Mankinen, E. A., *et al.*) 6(11): 653-656
— K-Ar ages of Pleistocene rhyolitic volcanism in the Coso Range, California
(Lanphere, M. A., *et al.*) 3(6): 339-341
Quaternary: Age of the Bishop Tuff of eastern California as determined by the fission-track method; discussion and reply
(Swinehart, J. B., *et al.*) 5(11): 648-650
Triassic: Triassic blueschist from northern California and North-central Oregon
(Hotz, P. E., *et al.*) 5(11): 659-663

California—geomorphology
frost action: Needle ice and wind in the White Mountains of California
(Beaty, C. B.) 2(11): 565-567
weathering: Insolation warmed over; discussion and reply
(Winkler, E. M., *et al.*) 5(3): 188-190
— Origin and configuration of the oxidized zone in Tertiary formations, Death Valley region, California
(Wilson, J. L., *et al.*) 5(11): 696-698

California—geophysical surveys
remote sensing: Geologic structures in northern California as detected from ERTS-1 satellite imagery
(Rich, E. I., *et al.*) 2(4): 165-169
— Near-infrared reflectance anomalies of andesite and basalt in southern California and Nevada
(Pohn, H. A.) 2(11): 547-550
— Origin of Mojave Desert dust plumes photographed from space
(Nakata, J. K., *et al.*) 4(11): 644-648

California—paleontology
Mollusca: Eocene rhyncholite from California
(Teichert, C., *et al.*) 3(4): 178-180

California—petrology
igneous rocks: Petrologic nature of the oceanic Moho; discussion and reply
(Luyendyk, B. P., *et al.*) 5(9): 578-579
intrusions: Early alkalic plutonism in the calc-alkalic batholithic belt of California
(Miller, C. F.) 5(11): 685-688
— Plutonic zones in the Peninsular Ranges of southern California and northern Baja California
(Gastil, R. G.) 3(7): 361-363
— Plutonic zones in the Peninsular Ranges of southern California and northern Baja California; discussion and reply
(Brown, B. W., *et al.*) 4(1): 9
magmas: Magma contamination within the volcanic pile; origin of andesite and dacite
(Eichelberger, J. C.) 2(1): 29-33
metamorphic rocks: South Fork Mountain Schist at Black Butte and Cottonwood Creek, northern California
(Bishop, D. G.) 5(10): 595-599
metamorphism: Effects of metamorphism on quartz cathodoluminescence
(Sprunt, E. S., *et al.*) 6(5): 305-308

California—sedimentary petrology
sedimentation: Franciscan limestones and their environments of deposition
(Wachs, D., *et al.*) 3(1): 29-33
— Franciscan limestones and their environments of deposition; discussion and reply
(Raymond, L. A., *et al.*) 3(6): 294-296
— Paleocurrents in part of the Franciscan Complex, California
(Telleen, K. E.) 5(1): 49-51
sediments: Remanent magnetization of modern tidal flat sediments from San Francisco Bay, California
(Graham, S.) 2(5): 223-226

California—seismology
crust: Upper mantle origin of Sierra Nevada uplift
(Crough, S. T., *et al.*) 5(7): 396-399
earthquakes: Effect of geologic structure and metamorphic fluids on seismic behavior of the San Andreas fault system in central and northern California
(Irwin, W. P., *et al.*) 3(12): 713-716
— Elevation changes preceding the San Fernando earthquake of February 9, 1971
(Castle, R. C., *et al.*) 2(2): 61-66
— Water-level fluctuations and earthquakes on the San Andreas fault zone
(Kovach, R. L., *et al.*) 3(8): 437-440

California—stratigraphy
Cretaceous: Middle to Late Cretaceous sedimentary melange, Franciscan Complex, northern California
(Gucwa, P. R.) 3(3): 105-108
Jurassic: Age and geologic significance of radiolarian cherts in the California Coast Ranges
(Pessagno, E. A., Jr.) 1(4): 153-156
— Significance of Mesozoic radiolarians from the pre-Nevadan rocks of the southern Klamath Mountains, California
(Irwin, W. P., *et al.*) 5(9): 557-562
Mesozoic: Possible modern analogs for rocks of the Franciscan Complex, Mount Oso area, California
(Raymond, L. A.) 2(3): 143-146
Paleogene: Early Tertiary ages from the coastal belt of the Franciscan Complex, northern California
(Evitt, W. R., *et al.*) 3(8): 433-436

California—structural geology
faults: Late Cenozoic ring faulting and volcanism in the Coso Range area of California
(Duffield, W. A.) 3(6): 335-338
— Possible strike-slip faulting in the southern California borderland
(Howell, D. G., *et al.*) 2(2): 93-98
— Possible strike-slip faulting in the southern California borderland; discussion and reply
(Cole, M. R., *et al.*) 3(1): 2-4
— Sinuosity of strike-slip fault traces
(Bridwell, R. J.) 3(11): 630-632
maps: Mapped offset on the right-lateral Kern Canyon Fault, southern Sierra Nevada, California
(Moore, J. G., *et al.*) 6(4): 205-208
neotectonics: Elevation changes preceding the San Fernando earthquake of February 9, 1971
(Castle, R. O., *et al.*) 2(2): 61-66
— Neogene acceleration of subsidence rates in southern California
(Yeats, R. S.) 6(8): 456-460
— Pliocene-Pleistocene break-up of the Sierra Nevada-White-Inyo Mountains Block and formation of Owens Valley
(Bachman, S. B.) 6(8): 461-463
tectonics: Curvature of the San Andreas Fault, California
(Woodford, A. O., *et al.*) 4(9): 573-575
— Curvature of the San Andreas Fault, California; discussion and reply
(Citron, G. P., *et al.*) 5(6): 324-325
— Geologic structures in northern California as detected from ERTS-1 satellite imagery
(Rich, E. I., *et al.*) 2(4): 165-169

— Hypothesis suggesting 700 km of right in California along northwest-oriented faults; comment
(Gastil, R. G.) 3(2): 84
— Hypothesis suggesting 700 km of right slip in California along northwest-oriented faults; reply
(Howell, D. G.) 4(10): 632-633
— Hypothesis suggesting 700 km of right slip in California along northwest-oriented faults; with discussion
(Howell, D. G.) 3(2): 81-83
— Late Cenozoic fault patterns and stress fields in the Great Basin and westward displacement of the Sierra Nevada Block
(Wright, L.) 4(8): 489-494
— Nature and regional significance of thrust faulting in the southern Inyo Mountains, eastern California
(Kelley, J. S., *et al.*) 3(9): 524-526
— Neogene tectonic evolution of the Salinian Block, West-central California
(Johnson, J. D., *et al.*) 2(1): 11-14
— Neogene tectonic evolution of the Salinian Block, West-central California; discussion
(Howell, D. G.) 4(9): 520
— Neogene tectonic evolution of the Salinian Block, West-central California; discussion and reply
(Gastil, R. G., *et al.*) 2(8): 391
— Turtleback surfaces of Death Valley viewed as phenomena of extensional tectonics
(Wright, L. A., *et al.*) 2(2): 53-54

California—tectonophysics
plate tectonics: Cenozoic uplifting of the Sierra Nevada in isostatic response to North American and Pacific plate interactions
(Hay, E. A.) 4(12): 763-766
— Deformation by soft-sediment extension in the Coastal Belt, Franciscan Complex
(Kleist, J. R.) 2(10): 501-504
— Intracontinental plate boundary east of Cape Mendocino, California
(Herd, D. G.) 6(12): 721-725
— Is the San Andreas a transform fault?
(Hill, M. L.) 2(11): 535-536
— Is the San Andreas a transform fault?; discussions and reply
(Silver, E. A., *et al.*) 3(3): 155-159
— Melanges in the Franciscan Complex, a product of triple-junction tectonics
(Fox, K. F., Jr.) 4(12): 737-740

Cambrian *see also under* geochronology *under* Delaware; Newfoundland; *see also under* stratigraphy *under* Alabama; Appalachians; New Brunswick; New England; Rhode Island; Wisconsin

Canada *see also* Appalachians; Atlantic Coastal Plain; British Columbia; Canadian Shield; Great Lakes region; Great Plains; Maritime Provinces; New Brunswick; Newfoundland; Northwest Territories; Ontario; Quebec; Rocky Mountains

Canada—stratigraphy
continental drift: Apparent polar wander paths and the joining of the Superior and Slave provinces during early Proterozoic time
(Roy, J. L., *et al.*) 6(3): 132-135
Ordovician: Late Ordovician-Early Silurian glaciation and the Ordovician-Silurian boundary in the northern Canadian Cordillera
(Lenz, A. C.) 4(5): 313-317
— Late Ordovician-Early Silurian glaciation and the Ordovician-Silurian boundary in the northern Canadian Cordillera; discussions and replies
(Johnson, J. G., *et al.*) 4(12): 795-797
Proterozoic: Apparent polar wander paths and the joining of the Superior and Slave provinces during early Proterozoic time
(Cavanaugh, M. D., *et al.*) 5(4): 207-211
— Apparent polar wander paths and the joining of the Superior and Slave provinces during early Proterozoic time
(Roy, J. L., *et al.*) 6(3): 132-135
— Paleomagnetism of the Gowganda and Chibougamau formations; evidence for 2,200-m.y.-old folding and remagnetization event of the Southern Province
(Morris, W. A.) 5(3): 137-140
Silurian: Late Ordovician-Early Silurian glaciation and the Ordovician-Silurian boundary in the northern Canadian Cordillera
(Lenz, A. C.) 4(5): 313-317
— Late Ordovician-Early Silurian glaciation and the Ordovician-Silurian boundary in the northern Canadian Cordillera; discussions and replies
(Johnson, J. G., *et al.*) 4(12): 795-797

Canada—structural geology
isostasy: Isostasy and eustasy of Hudson Bay
(Hillaire-Marcel, C., *et al.*) 6(2): 117-122

Canada—tectonophysics
isostasy: Collapse of the Hudson Bay ice center and glacio-isostatic rebound
(Andrews, J. T., *et al.*) 4(2): 73-75
— Support for a stable late Wisconsin ice margin (14,000 to ∼9000 B.P.); a test based on glacial rebound
(Andrews, J. T.) 3(11): 617-620
plate tectonics: Apparent polar wander paths and the joining of the Superior and Slave provinces during early Proterozoic time
(Roy, J. L., *et al.*) 6(3): 132-135
— Early Paleozoic ophiolite complexes of Newfoundland; isotopic ages of zircons
(Mattinson, J. M.) 3(4): 181-183
— Has there been an oceanic margin to western North American since Archean time?
(Badham, J. P. N.) 6(10): 621-625

Canadian Shield—geomorphology
glacial geology: A case against deep erosion of shields by ice sheets
(Sugden, D. E.) 4(10): 580-582
— Erosion of shields by ice sheets; discussion
(Padgham, W. A.) 5(7): 395

Canadian Shield—stratigraphy
continental drift: Apparent polar wander paths and the joining of the Superior and Slave provinces during early Proterozoic time
(Cavanaugh, M. D., *et al.*) 5(4): 207-211

Canadian Shield—structural geology
tectonics: Paleomagnetism of the Gowganda and Chibougamau formations; evidence for 2,200-m.y.-old folding and remagnetization event of the Southern Province
(Morris, W. A.) 5(3): 137-140

Canadian Shield—tectonophysics
plate tectonics: Gravity anomalies and deep structure of the Cape Smith Foldbelt, northern Ungava, Quebec
(Thomas, M. D., *et al.*) 5(3): 169-172
— Gravity anomalies and deep structure of the Cape Smith Foldbelt, northern Ungava, Quebec; discussion and reply
(Baer, A. J., *et al.*) 5(11): 651-653

carbon—isotopes
C-13/C-12: Carbon and oxygen isotopes as diagenetic and stratigraphic tools; surface and subsurface data, Barbados, West Indies
(Allan, J. R., *et al.*) 5(1): 16-20
— Metamorphic alteration of carbon isotopic composition in ancient sedimentary organic matter; new evidence from Australia and South Africa
(McKirdy, D. M., *et al.*) 2(12): 591-595

carbonate rocks *see* carbonate rocks *under* sedimentary rocks

carbonates *see* carbonates *under* minerals

Caribbean region—stratigraphy
changes of level: Age and magnitude of the late Pleistocene sea-level rise on the eastern Yucatan Peninsula
(Szabo, B. J., *et al.*) 6(12): 713-715

Caribbean region—tectonophysics
plate tectonics: Paleomagnetic results from Cretaceous sediments in Honduras; tectonic implications
(Gose, W. A., *et al.*) 5(8): 505-508
— Paleomagnetic results from Cretaceous sediments in Honduras; tectonic implications
(Wilson, H. H., *et al.*) 6(7): 440-447
— Petrology and geochemistry of mafic rocks from the Cayman Trench; evidence for spreading
(Perfit, M. R.) 5(2): 105-110

Caribbean Sea—oceanography
ocean floors: A radial pattern of sea-floor deformation in the southwestern Caribbean Sea
(Christofferson, E., *et al.*) 6(6): 341-344

Caribbean Sea—petrology
tektites: Clinopyroxene-bearing glass spherules associated with North American microtektites
(John, C., *et al.*) 2(12): 599-602

Caribbean Sea—stratigraphy
Pliocene: Pliocene closing of the Isthmus of Panama, based on biostratigraphic evidence from nearby Pacific Ocean and Caribbean Sea cores
(Keigwin, L. D., Jr.) 6(10): 630-634

Caribbean Sea—tectonophysics
sea-floor spreading: Petrology and geochemistry of mafic rocks from the Cayman Trench; evidence for spreading
(Perfit, M. R.) 5(2): 105-110

Cenozoic *see* Cenozoic *under* geochronology *under* Tahiti

Cenozoic—geochronology
paleomagnetism: Late Cenozoic magnetostratigraphy; comparisons with bio-, climato-, and lithozones
(Kukla, G., *et al.*) 3(12): 704-707
time scales: Revised Cenozoic polarity time scale
(Tarling, D. H., *et al.*) 4(3): 133-136
— Revised magnetic polarity time scale for Late Cretaceous and Cenozoic time
(LaBrecque, J. L., *et al.*) 5(6): 330-335

Cenozoic—paleontology
Radiolaria: Silica, diatoms, and Cenozoic radiolarian evolution
(Harper, H. E., Jr., *et al.*) 3(4): 175-177

Cenozoic—stratigraphy
biostratigraphy: Geologic significance of coiling direction in the planktonic foraminifera Pulleniatina
(Saito, T.) 4(5): 305-309

Central America *see also* Belize; Guatemala; Honduras

Central America—stratigraphy
biogeography: Pliocene closing of the Isthmus of Panama, based on biostratigraphic evidence from nearby Pacific Ocean and Caribbean Sea cores
(Keigwin, L. D., Jr.) 6(10): 630-634
continental drift: Paleomagnetic results from Cretaceous sediments in Honduras; tectonic implications
(Gose, W. A., *et al.*) 5(8): 505-508

Central America—tectonophysics
plate tectonics: Caribbean-Americas plate boundary in Guatemala and southern Mexico as seen on Skylab IV orbital photography
(Muehlberger, W. R., *et al.*) 3(5): 232-235

chain silicates *see* chain silicates *under* minerals

changes of level *see also under* stratigraphy *under* Arctic Ocean; Australia; Caribbean region; Eastern U.S.; Florida; Greenland; Pacific Ocean; Pleistocene; Quaternary; Quebec; Western Australia

changes of level—concepts
eustacy: Eustatic amplitude variations and world glacial changes
(Morner, N. A.) 3(3): 109-110

changes of level—correlation
orogeny: Relation in time between eustacy and orogeny; a presently indeterminate problem; reply
(Rona, P. A.) 2(4): 201-202
— Sea-floor spreading and orogeny; correlation or anticorrelation?; discussion
(Johnson, J. G.) 2(4): 199-201

changes of level—detection
terraces: Deep eustatic terrace levels; further speculations
(Pratt, R. M., *et al.*) 2(3): 155-159

Chile—petrology
metasomatism: Metamorphic petrology of the Sarmiento ophiolite complex, Chile
(Elthon, D., *et al.*) 6(8): 464-468

Chile—sedimentary petrology
sedimentary structures: Large-scale traction-produced structures in deep-water fan-channel conglomerates in southern Chile
(Winn, R. D., Jr., *et al.*) 5(1): 41-44

Chile—stratigraphy
Quaternary: Quaternary glaciations and environments of northern Isla Chiloe, Chile
(Heusser, C. J., *et al.*) 5(5): 305-308

China—areal geology
symposia: Penrose Conference report; Erik Norin Penrose Conference on Tibet
(Molnar, P., *et al.*) 5(8): 461-463

China—structural geology
neotectonics: Relation of the tectonics of eastern China to the India-Eurasia collision; application of slip-line field theory to large-scale continental tectonics
(Molnar, P., *et al.*) 5(4): 212-216
tectonics: Tectonic models of the Tibetan Plateau
(Powell, C. M., *et al.*) 3(12): 727-731
— Tectonic models of the Tibetan Plateau; discussion and reply
(Rod, E., *et al.*) 4(7): 390

chlorine—abundance
volcanic ash: Scavenging of volcanic aerosol by ash; atmospheric and volcanologic implications
(Rose, W. I., Jr.) 5(10): 621-624

clastic rocks *see* clastic rocks *under* sedimentary rocks

clastic sediments *see* clastic sediments *under* sediments

clay *see under* clastic sediments *under* sediments

clay mineralogy—experimental studies
kaolinitization: Kaolinization of feldspar as displayed in scanning electron micrographs
(Keller, W. D.) 6(3): 184-188

cleavage *see under* style *under* foliation

coal *see also under* economic geology *under* Appalachians; symposia

Coelenterata—Anthozoa
Holocene: Thickest recorded Holocene reef section, Isla Perez core hole, Alacran Reef, Mexico
(Macintyre, I. G., *et al.*) 5(12): 749-754

Coelenterata—biogeography
faunal studies: Endemism and similarity indices; clues to the zoogeography of North American Mississippian corals
(Sando, W. J., *et al.*) 3(11): 661-664

Coelenterata—Scleractinia
ecology: Basis for skeletal plasticity among reef-building corals
(Weber, J. N.) 2(3): 153-154
Holocene: Submarine recrystallization of a coral skeleton in a Holocene Bahamian reef
(Scherer, M.) 2(10): 499-500

Colombia—geomorphology
fluvial features: The incomplete flood plain
(Tanner, W. F.) 2(2): 105-106

Colorado—economic geology
diamonds: Diamond in kimberlitic diatremes of northern Colorado
(McCallum, M. E., *et al.*) 4(8): 467-469

Colorado—engineering geology
slope stability: Dynamics of dense-snow avalanches interpreted from broken trees
(Mears, A. I.) 3(9): 521-523
— Gully erosion, northwestern Colorado; a threshold phenomenon
(Patton, P. C., *et al.*) 3(2): 88-89

Colorado—environmental geology
geologic hazards: Colorado Bigh Thompson flood; geologic evidence of a rare hydrologic event
(Costa, J. E.) 6(10): 617-620
— Flooding in Big Thompson River, Colorado, tributaries, controls on channel erosion and estimates of recurrence interval
(Balog, J. D.) 6(4): 200-204

Colorado—geochronology
Holocene: Comment: relative age dating techniques . . .
(White, S. E.) 2(7): 326
— Relative age dating techniques and a late Quaternary chronology, Arikaree Cirque, Colorado
(Carroll, T.) 2(7): 321-325

Colorado—geomorphology
fluvial features: Terraces of Douglas Creek, northwestern Colorado; an example of episodic erosion
(Womack, W. R., *et al.*) 5(2): 72-76

Colorado—geophysical surveys
gravity surveys: Geophysical evidence for a volcanic subsidence feature near Silver Cliff, Colorado
(Kleinkopf, M. D., *et al.*) 5(7): 445-447

Colorado—sedimentary petrology
sedimentary structures: Green River Formation of Utah and Colorado and playa-lake deposition; discussion
(Moussa, M. T.) 4(6): 326, 382
— Playa-lake deposition; Green River Formation, Piceance Creek basin, Colorado
(Lundell, L. L., *et al.*) 3(9): 493-497

Colorado—structural geology
neotectonics: Quaternary movements on the Golden Fault, Colorado
(Kirkham, R. M.) 5(11): 689-692

Colorado Plateau—geophysical surveys
magnetic surveys: Aeromagnetics and the transition between the Colorado Plateau and basin range provinces
(Shuey, R. T., *et al.*) 1(3): 107-110

Colorado Plateau—structural geology
tectonics: Age of structural differentiation between the Colorado Plateau and Basin and Range provinces in southwestern Utah
(Rowley, P. D., *et al.*) 6(1): 51-55

Columbia Plateau—geochemistry
basalt: A computer-assisted graphical method for identification and correlation of igneous rock chemistries
(Wright, T. L., *et al.*) 6(1): 16-20

Columbia Plateau—sedimentary petrology
weathering: New evidence for pre-Wisconsin flooding in the channeled scabland of eastern Washington
(Patton, P. C., *et al.*) 6(9): 567-571

congresses *see* symposia

Connecticut—stratigraphy
Mesozoic: Paleosol caliche in the New Haven Arkose, Connecticut; record of semiaridity in Late Triassic-Early Jurassic time
(Hubert, J. F.) 5(5): 302-304

conodonts—biostratigraphy
biogeography: Correlation of the Cambrian-Ordovician boundary between the Acado-Baltic and North American faunal provinces
(Landing, E., *et al.*) 6(2): 75-78
Permian: Permian-Triassic sequence in Northwest Utah
(Clark, D. L., *et al.*) 5(11): 655-658
zoning: Progress toward reconciliation of Lower Mississippian conodont and foraminiferal zonations
(Brenckle, P., *et al.*) 2(9): 433-436

conodonts—faunal studies
Ordovician: Recognizing the conodont assemblage Amorphognathus by correlation coefficient
(Winder, C. G.) 2(6): 299-300
Pennsylvanian: Pennsylvanian conodonts of northwestern Illinois; summary and new systematics
(Merrill, G. K.) 3(12): 721-722

conservation *see* conservation *under* environmental geology *under* United States

conservation—environment
shorelines: Monitoring the coastal environment
(Morisawa, M., *et al.*) 2(8): 385-388

conservation—natural resources
water resources: A reverence for rivers
(Leopold, L. B.) 5(7): 429-430

continental drift *see* continental drift *under* stratigraphy *under* Atlantic Ocean; Canada; Canadian Shield; Central America; Gulf of Mexico; Malagasy Republic; North America; Northern Hemisphere; Permian; Southern Hemisphere; Triassic; Western Australia; *see also under* tectonophysics *under* North America

continental drift—concepts
collision: Hot spots and continental break-up; implications for collisional orogeny
(Dewey, J. F., *et al.*) 2(2): 57-60

continental drift—Gondwana
Southern Hemisphere: Paired metamorphic belts in Precambrian granulite rocks in Gondwanaland
(Katz, M. B.) 2(5): 237-241

continental drift—mechanism
concepts: Plate tectonics; a plastic as opposed to a rigid body model
(Roper, P. J.) 2(5): 247-250

continental drift—Pangaea
global: Alfred Wegener's reconstruction of Pangea
(Drake, E. T.) 4(1): 41-44
— Pangeaic orogenic system
(Hurley, P. M.) 2(8): 373-376
— Wegener fit; discussion
(Teichert, C.) 4(4): 200
— Widespread continental rifting; some considerations of timing and mechanism
(Sawkins, F. J.) 4(7): 427-430

continental drift—patterns
symposia: Penrose Conference report; Paleozoic margins of paleo-American and paleo-Eurafrican plates; drifting or rifting
(Skehan, J. W., *et al.*) 4(3): 185-186

continental drift—Tethys
Mediterranean region: Paleoceanography of the Mesozoic Alpine Tethys; summary
(Hsu, K. J.) 3(6): 347-348
— Where are the passive margins of the western Tethys Ocean?
(Le Pichon, X., *et al.*) 6(10): 597-600

continental shelf *see also under* oceanography *under* Atlantic Ocean

continental slope *see also under* oceanography *under* Eastern U.S.

copper *see also under* economic geology *under* Western U.S.

corals *see* corals *under* ecology *under* reefs

Cretaceous *see also under* geochronology *under* Alaska; Atlantic Coastal Plain; Dominican Republic; Montana; North Carolina; *see also under* stratigraphy *under* Alaska; Arctic Ocean; California; Honduras; Italy; Mexico; North Sea; Pacific Ocean; Sweden; Utah

Cretaceous—geochronology
time scales: Dilemma of *t* Cretaceous time scale and rates of sea-floor spreading
(Baldwin, B., *et al.*) 2(6): 267-270
— Revised magnetic polarity time scale for Late Cretaceous and Cenozoic time
(LaBrecque, J. L., *et al.*) 5(6): 330-335

Cretaceous—stratigraphy
biostratigraphy: Mesozoic holococcoliths
(Wind, F. H., *et al.*) 6(3): 140-142
transgression: Speculations on real sea-level changes and vertical motions of continents at selected times in the Cretaceous and Tertiary periods
(Bond, G.) 6(4): 247-250

cross-bedding *see under* planar bedding structures *under* sedimentary structures

crust *see also under* seismology *under* California; Rocky Mountains; South America; *see also under* tectonophysics *under* Idaho; Midwest; New Guinea; Northern Hemisphere; Phanerozoic; United States; Western U.S.

crust—composition
chemical composition: Kaersutites, suboceanic low-velocity zone, and the origin of mid-oceanic ridge basalts
(Basu, A. R., *et al.*) 5(6): 365-368
evolution: Secular trends in the composition of sedimentary rock assemblages; Archean through Phanerozoic time
(Schwab, F. L.) 6(9): 532-536
interpretation: Petrologic nature of the oceanic Moho
(Clague, D., *et al.*) 5(3): 133-136
— Petrologic nature of the oceanic Moho; discussion and reply
(Luyendyk, B. P., *et al.*) 5(9): 578-579
oceanic type: Magnesium metasomatism during hydrothermal alteration of new oceanic crust
(Bloch, S., *et al.*) 6(5): 275-277

crust—evolution
Archean: Earliest Precambrian ultramafic-mafic volcanic rocks; ancient oceanic crust of relic terrestrial maria?
(Glikson, A. Y.) 4(4): 201-205

crust—genesis
continental type: Origin of continental crust
(Ashgirei, G. D.) 2(8): 401-404

crust—properties
elastic properties: Stresses induced by the addition or removal of overburden and associated thermal effects
(Haxby, W. F., *et al.*) 4(3): 181-184
— Thermal contraction and alteration of the oceanic crust
(Epp, D., *et al.*) 6(12): 726-728

crust—thickness
interpretation: Regional geotherms and lithospheric thickness
(Chapman, D. S., *et al.*) 5(5): 265-268

crystal chemistry *see also* crystal growth; minerals

crystal growth *see also* minerals

crystal growth—carbonates
aragonite: Radial aragonite ooids, Lizard Island, Greater Barrier Reef, Queensland, Australia
(Davies, P. J., *et al.*) 4(2): 120-122
— Submarine botryoidal aragonite in Holocene reef limestones, Belize
(Ginsburg, R. N., *et al.*) 4(7): 431-436
calcite: Displacive calcite; evidence from recent and ancient calcretes
(Watts, N. L.) 6(11): 699-703
— Former magnesian calcite and aragonite submarine cements in upper Paleozoic reefs of the Canadian Arctic; a summary
(Davies, G. R.) 5(1): 11-15
— Length-slow and length-fast calcite; a tale of two elongations
(Dickson, J. A. D.) 6(9): 560-561
— Submarine recrystallization of a coral skeleton in a Holocene Bahamian reef
(Scherer, M.) 2(10): 499-500
dolomite: Construction of limpid dolomite
(Weaver, C. E.) 3(8): 425-428
— Dolomite synthesis and crystal growth
(Deelman, J. C.) 3(8): 471-472

crystal growth—framework silicates, silica minerals
quartz: Structure and significance of planar deformation features in synthetic quartz
(Twiss, R. J.) 2(7): 329-332
— Substructures of deformation lamellae in quartz
(Christie, J. M., *et al.*) 2(8): 405-408

crystal growth—halides
synthesis: Magnesium hydroxychloride; a possible pH buffer in marine evaporite brines?
(Bodine, M. W., Jr.) 4(2): 76-80

crystal growth—orthosilicates
olivine: On elongate olivine of metamorphic orgin
(Evans, B. W., *et al.*) 2(3): 131-132

crystal growth—sheet silicates, clay minerals
kaolinite: Kaolinization of feldspar as displayed in scanning electron micrographs
(Keller, W. D.) 6(3): 184-188

crystal growth—sulfates
gypsum: The salt that was
(Schreiber, B. C., *et al.*) 5(9): 527-528

crystal growth—sulfides
pyrite: Microbiota from the Late Proterozoic Tindir Group, Alaska
(Allison, C. W., *et al.*) 1(2): 65-68
— Pyrite framboid; animal, vegetable, or mineral?; discussion
(Kalliokoski, J.) 2(1): 26-27
— Pyritized microfossils and pyrite framboids; reply
(Allison, C. W., *et al.*) 2(4): 202-203

crystal structure *see also* minerals

crystal structure—orthosilicates
olivine: Mechanisms of preferred orientations of olivine in tectonite peridotite
(Ave Lallemant, H. G.) 3(11): 653-656

deformation *see also* geophysics; structural analysis

deformation—experimental studies
fractures: Are pseudotachylites products of fracture or fusion?
(Wenk, H. R.) 6(8): 507-511
lamellae: Structure and significance of planar deformation features in synthetic quartz
(Twiss, R. J.) 2(7): 329-332
— Substructures of deformation lamellae in quartz
(Christie, J. M., *et al.*) 2(8): 405-408
layered media: Compositional differentiation in an experimentally deformed salt-mica specimen
(Means, L. D., *et al.*) 2(1): 15-16
plasticity: Hornblende deformation features
(Rooney, T. P., *et al.*) 3(7): 364-366
pressure solution: "Pressure solution" or indentation?
(Deelman, J. C.) 3(1): 23-24
— "Pressure solution" or indentation?; discussion and reply
(Burger, H. R., *et al.*) 3(6): 292-294
— "Pressure solution" or indentation?; discussion and reply
(Atkinson, B. K., *et al.*) 3(8): 477-478
— "Pressure solution" or indentation; discussion and reply
(McEwen, T. J., *et al.*) 5(4): 249-252
— Reduction of porosity by pressure solution; experimental verification
(Sprunt, E. S., *et al.*) 4(8): 463-466
— Reduction of porosity by pressure solution; experimental verification; discussion and reply
(Deelman, J. C., *et al.*) 5(5): 261-262

deformation—field studies
boudinage: Deformation by soft-sediment extension in the Coastal Belt, Franciscan Complex
(Kleist, J. R.) 2(10): 501-504
— Dewatering origin of cleavage in light of deformed calcite veins and clastic dikes in Martinsburg Slate, Delaware water gap, New Jersey
(Beutner, E. C., *et al.*) 5(2): 118-122
folds: Fold distortion; a new indicator of tectonic transport direction
(Alvarez, W.) 6(11): 657-660
foliation: Formation of spaced cleavage and folds in brittle limestone by dissolution
(Alvarez, W., *et al.*) 4(11): 698-701
pressure solution: "Slip" cleavage caused by pressure solution in a buckle fold
(Groshong, R. H., Jr.) 3(7): 411-413
strain: Fossil distortion and decollement tectonics of the Appalachian Plateau
(Engelder, T., *et al.*) 5(8): 457-460
— Rotation and dewatering during slaty cleavage formation; some new evidence and interpretations
(Alterman, I. B.) 1(1): 33-36

deformation—theoretical studies
cleavage: Quantitative theory for metamorphic differentiation in development of crenulation cleavage
(Fletcher, R. C.) 5(3): 185-187
— Quantitative theory for metamorphic differentiation in development of crenulation cleavage; discussion and reply
(Durney, D. W., *et al.*) 6(2): 68-69
dislocations: Sheared lherzolites; from the point of view of rock mechanics
(Goetze, C.) 3(4): 172-173
fractures: Faulting, fracturing, and seismicity as functions of glacio-isostasy in Fennoscandia
(Moerner, N. A.) 6(1): 41-45
review: Early theories and hypotheses on pressure-solution-redeposition
(Durney, D. W.) 6(6): 369-372
strain: Sedimentary fabrics and their relation to strain-analysis methods
(Boulter, C. A.) 4(3): 141-146
stress: Finite-element model of a mountain massif
(Sturgul, J. R., *et al.*) 4(7): 439-442
— Finite-element model of a mountain massif; discussion and reply
(Goguel, J., *et al.*) 5(5): 260-261

Delaware—geochronology
Cambrian: A Paleozoic age for some charnockitic-anorthositic rocks
(Foland, K. A., *et al.*) 6(3): 143-146

Delaware—structural geology
tectonics: Gravity anomalies associated with the Salisbury Embayment, Maryland-southern Delaware
(Sabet, M. A.) 5(7): 433-436

deltas *see under* environment *under* sedimentation

Devonian *see* Devonian *under* stratigraphy *under* Midwest; West Virginia

diagenesis *see also* sedimentation

diagenesis—cementation
carbonate rocks: Length-slow and length-fast calcite; a tale of two elongations
(Dickson, J. A. D.) 6(9): 560-561
limestone: Carbon isotopes and limestone cement
(Hudson, J. D.) 3(1): 19-22
lithoherms: Lithoherms in the Straits of Florida
(Neumann, A. C., *et al.*) 5(1): 4-10
reefs: Former magnesian calcite and aragonite submarine cements in upper Paleozoic reefs of the Canadian Arctic; a summary
(Davies, G. R.) 5(1): 11-15
— Submarine botryoidal aragonite in Holocene reef limestones, Belize
(Ginsburg, R. N., *et al.*) 4(7): 431-436

diagenesis—dolomitization
controls: Diagenetic dolomite formation related to Paleozoic paleogeography of the Cordilleran miogeocline in Nevada
(Dunham, J. B., *et al.*) 6(9): 556-559
symposia: Penrose Conference report; Water and carbonate rocks
(Freeman, T. (convener), *et al.*) 2(4): 179-180

diagenesis—effects
heavy minerals: Glacial deposits identified by chattermark trails in detrital garnets; discussion and reply
(Bull, P. A., *et al.*) 5(4): 248-249
porosity: Reduction of porosity by pressure solution; experimental verification
(Sprunt, E. S., *et al.*) 4(8): 463-466
— Reduction of porosity by pressure solution; experimental verification; discussion and reply
(Deelman, J. C., *et al.*) 5(5): 261-262
properties: Selective subduction
(Moore, J. C.) 3(9): 530-532

diagenesis—environment
early diagenesis: Influence of climate on the early diagenesis of carbonate eolianites
(Ward, W. C.) 1(4): 171-174

diagenesis—geochemistry
sodium: Sodium; paleosalinity indicator in ancient carbonate rocks
(Veizer, J., *et al.*) 5(3): 177-179

diagenesis—indicators
anhydrite: Sedimentological significance of nodular and laminated anhydrite
(Dean, W. E., *et al.*) 3(7): 367-372
foraminifera: Diagenesis of magnesian calcite; evidence from miliolacean foraminifera
(Towe, K. M., *et al.*) 4(6): 337-339
isotopes: Carbon and oxygen isotopes as diagenetic and stratigraphic tools; surface and subsurface data, Barbados, West Indies
(Allan, J. R., *et al.*) 5(1): 16-20

diagenesis—materials
carbonate sediments: Deep-sea carbonates; acoustic reflectors and lysocline fluctuations
(Berger, W. H., *et al.*) 6(1): 11-15
organic materials: Pleistocene stratigraphy in southern Florida based on amino acid diagenesis in fossil Mercenaria
(Mitterer, R. M.) 2(9): 425-428

diagenesis—processes
calcitization: Calcitization of Edwards Group dolomites in the Balcones fault zone aquifer, South-central Texas
(Abbott, P. L.) 2(7): 359-362
— Displacive calcite; evidence from recent and ancient calcretes
(Watts, N. L.) 6(11): 699-703
— Submarine recrystallization of a coral skeleton in a Holocene Bahamian reef
(Scherer, M.) 2(10): 499-500
compaction: Limestone compaction; an enigma
(Shinn, E. A., *et al.*) 5(1): 21-24
— Limestone compaction; an enigma
(Chanda, S. K., *et al.*) 6(4): 198-199
— "Pressure solution" or indentation?
(Deelman, J. C.) 3(1): 23-24
— "Pressure solution" or indentation?; discussion and reply
(Burger, H. R., *et al.*) 3(6): 292-294
— "Pressure solution" or indentation?; discussion and reply
(Atkinson, B. K., *et al.*) 3(8): 477-478
— "Pressure solution" or indentation; discussion and reply
(McEwen, T. J., *et al.*) 5(4): 249-252
dissolution: Destructive diagenesis of carbonate sediments in the eastern Skagerrak, North Sea
(Alexandersson, E. T.) 6(6): 324-327
— Pelagic limestone and radiolarite of the Tethyan Mesozoic: a genetic model
(Bosellini, A., *et al.*) 3(5): 279-282

diamond *see under* native elements and alloys *under* minerals
diamonds *see also under* economic geology *under* Colorado; Guyana
diastrophism *see* epeirogeny; orogeny
diatoms *see* diatoms *under* algae
diatremes *see under* intrusions
dictionaries *see* lexicons
Dinoflagellata *see* Dinoflagellata *under* palynomorphs
dolomite *see under* carbonates *under* crystal growth; minerals
dolomitization *see* dolomitization *under* diagenesis; *see under* processes *under* sedimentation
dolostone *see* dolostone *under* carbonate rocks *under* sedimentary rocks
Dominican Republic—geochronology
Cretaceous: Early Cretaceous basement rocks in Hispaniola
(Kesler, S. E., *et al.*) 5(4): 245-247
Earth—concepts
Steno, Nicholas: Nicholas Steno and his geologic paradigm
(Williams, E. G.) 1(3): 112
Earth—evolution
expansion: An expanding Earth on the basis of sea-floor spreading and subduction rates
(Faul, H., *et al.*) 6(6): 377-383
size: An expanding Earth on the basis of sea-floor spreading and subduction rates
(Steiner, J.) 5(5): 313-318

Earth—interior
heat flow: Heat loss from the Earth; new estimate
(Williams, D. L., *et al.*) 2(7): 327-328

earthquakes *see also* engineering geology; seismology; *see* earthquakes *under* seismology *under* Alaska; Asia; California; Far East; Guatemala; Illinois; India; Israel; Japan; Jordan; Rhode Island; South America; South Carolina

earthquakes—magnitude
prediction: Application of linear statistical models of earthquake magnitude versus fault length in estimating maximum expectable earthquakes
(Mark, R. K.) 5(8): 464-466
theoretical studies: Incomplete formulations of the regression of earthquake magnitude with surface fault rupture length
(Bolt, B. A.) 6(4): 233-235

earthquakes—prediction
precursors: Precursory and coseismic water-pressure variations in stick-slip experiments
(Sundaram, P. N., *et al.*) 4(2): 108-110

Eastern Hemisphere *see also* Africa; Antarctic Ocean; Antarctica; Arctic Ocean; Asia; Atlantic Ocean; Eurasia; Europe; Indian Ocean; USSR

Eastern U.S.—oceanography
continental slope: IPOD-USGS multichannel seismic reflection profile from Cape Hatteras to the Mid-Atlantic Ridge
(Grow, J. A., *et al.*) 5(10): 625-630

Eastern U.S.—sedimentary petrology
sedimentation: Construction of limpid dolomite
(Weaver, C. E.) 3(8): 425-428

Eastern U.S.—stratigraphy
changes of level: Late Quaternary sea-level curve; reinterpretation based on glaciotectonic influence
(Dillon, W. P., *et al.*) 6(1): 56-60
— Nodal tidal cycle of 18.6 yr.; its importance in sea-level curves of the East Coast of the United States and its value in explaining long-term sea-level changes
(Kaye, C. A., *et al.*) 1(3): 141-144
Quaternary: Recent ice age in Florida?; discussion and reply
(Bradley, R. S., *et al.*) 4(4): 197-198
— Return of the ice age and drought in peninsular Florida
(Moran, J. M.) 3(12): 695-696

Eastern U.S.—structural geology
faults: Eastern Piedmont fault system; speculation on its extent
(Hatcher, R. D., Jr., *et al.*) 5(10): 636-640

ecology—Brachiopoda
marine environment: The depths inhabited by Silurian brachiopod communities; discussion and reply
(Shabica, S. V., *et al.*) 4(3): 132,187-191

economic geology—symposia
coal: Symposium; Western coal: energy crisis vs. environmental impact
(Talbot, J. L.) 2(2): 79-80
— Technical session; Geologic aspects of coal conversion
(Barlow, J. A.) 2(2): 78-79

education—general
college-level education: Evaluating professional standards
(Watkins, N. D.) 4(1): 10
— Evaluating professional standards; rating of teaching performance; letter discussion
(Slagle, E. S.) 4(4): 254
— Women in academia; students and professors
(Crawford, M. L., *et al.*) 5(8): 502-503

electrical logging *see* well-logging

electrical surveys *see under* geophysical surveys *under* North Carolina

energy sources *see also under* economic geology *under* Gulf Coastal Plain; United States

engineering geology *see also* deformation; environmental geology; geodesy; geophysical methods; ground water; mining geology; rock mechanics

engineering geology—practice
objectives: Geologic needs and knowledge of real estate brokers and builders
(Mathewson, C. C., *et al.*) 2(11): 539-542

England—geochronology
Ordovician: Apatite fission-track dating of a sample from the type Caradoc (Middle Ordovician) Series in England
(Ross, R. J., Jr., *et al.*) 4(8): 505-506

English Channel—tectonophysics
plate tectonics: Possible "Caledonian" subduction under the Domnonean domain, North Armorican area
(Lefort, J. P.) 5(9): 523-526

environmental geology *see also* ecology; engineering geology

environmental geology—concepts
nomenclature: Geologic needs and knowledge of real estate brokers and builders
(Mathewson, C. C., *et al.*) 2(11): 539-542

environmental geology—practice
policy: Geology and public policy
(Lundgren, L.) 4(11): 657-660

environmental geology—symposia
energy sources: Symposium; Western coal: energy crisis vs. environmental impact
(Talbot, J. L.) 2(2): 79-80

Eocene *see* Eocene *under* geochronology *under* Wyoming; *see also under* stratigraphy *under* Oregon; Wyoming

Eocene—stratigraphy
transgression: Speculations on real sea-level changes and vertical motions of continents at selected times in the Cretaceous and Tertiary periods
(Bond, G.) 6(4): 247-250

epeirogeny *see also* orogeny

epeirogeny—Cretaceous
Atlantic region: Mesozoic epeirogeny at the South Atlantic margin and the Tristan hot spot
(Neill, W. M.) 4(8): 495-498
North America: Evidence for continental subsidence in North America during the Late Cretaceous global submergence
(Bond, G.) 4(9): 557-560

erosion *see* erosion *under* processes *under* geomorphology

Ethiopia—general
surveys: Special report; recent geologic research in Ethiopia
(Kalb, J. E.) 2(6): 266

Ethiopia—stratigraphy
Phanerozoic: Interpretation of the stratigraphy of northern Ethiopia according to the model of plate tectonics
(Beyth, M.) 1(2): 81-82
Proterozoic: Interpretation of the stratigraphy of northern Ethiopia according to the model of plate tectonics
(Beyth, M.) 1(2): 81-82

Ethiopia—tectonophysics
plate tectonics: Paleorifting between the Gregory and Ethiopian rifts
(Cerling, T. E., *et al.*) 5(7): 441-444

Eurasia—petrology
metamorphic rocks: Origins of some ophiolite-related metamorphic rocks of the "Tethyan" belt
(Woodcock, N. H., *et al.*) 5(6): 373-376

Eurasia—tectonophysics
plate tectonics: Absolute motion of the Eurasian Plate; a problem in vector geometry
(Grette, J. F., *et al.*) 2(11): 527-528

— Absolute motion of the Eurasian plate; a problem in vector geometry; discussion
(Seeger, C. R.) 3(3): 159
— Slip rates and morphology of continental collision belts
(Avraham, Z. B., *et al.*) 4(11): 661-664
Europe *see also* the individual nations
Europe—structural geology
tectonics: Microplate tectonics, oblique collisions, and evolution of the Hercynian orogenic systems
(Badham, J. P. N., *et al.*) 3(7): 373-376
Europe—tectonophysics
plate tectonics: Collision of irregular continental margins; implications for foreland deformation of alpine-type orogens
(Sengor, A. M. C.) 4(12): 779-782
europium—geochemistry
kimberlite: Eu anomaly in kimberlite
(Reitan, P. H.) 2(2): 72
evaporites *see* evaporites *under* chemically precipitated rocks *under* sedimentary rocks
Far East—seismology
earthquakes: Relation of the tectonics of eastern China to the India-Eurasia collision; application of slip-line field theory to large-scale continental tectonics
(Molnar, P., *et al.*) 5(4): 212-216
Far East—tectonophysics
plate tectonics: Tectonic models of the Tibetan Plateau
(Powell, C. M., *et al.*) 3(12): 727-731
— Tectonic models of the Tibetan Plateau; discussion and reply
(Rod, E., *et al.*) 4(7): 390
faults—displacements
active faults: Patterns of displacement along the Wasatch Fault
(Hamblin, W. K.) 4(10): 619-622
age: Neogene tectonic evolution of the Salinian Block, West-central California
(Johnson, J. D., *et al.*) 2(1): 11-14
— Neogene tectonic evolution of the Salinian Block, West-central California; discussion
(Howell, D. G.) 4(9): 520
— Neogene tectonic evolution of the Salinian Block, West-central California; discussion and reply
(Gastil, R. G., *et al.*) 2(8): 391
normal faults: Normal faulting and in situ stress in the South Carolina coastal plain near Charleston
(Zoback, M. D., *et al.*) 6(3): 147-152
— Tectonic development of the northeast part of the Rio Puerco fault zone, New Mexico
(Slack, P. B.) 3(11): 665-668
overthrust faults: A model for the development of thin overthrust sheets of crystalline rocks
(Armstrong, R. L., *et al.*) 2(1): 35-40
— Radiometric dating of thrusting; discussion
(Hoffman, J., *et al.*) 2(11): 526
reverse faults: Belair fault zone; evidence of Tertiary fault displacement in eastern Georgia
(Prowell, D. C., *et al.*) 6(11): 681-684
— Quaternary movements on the Golden Fault, Colorado
(Kirkham, R. M.) 5(11): 689-692
strike-slip faults: Effect of geologic structure and metamorphic fluids on seismic behavior of the San Andreas fault system in central and northern California
(Irwin, W. P., *et al.*) 3(12): 713-716
— Fault movement (afterslip) following the Guatemala earthquake of February 4, 1976
(Bucknam, R. C., *et al.*) 6(3): 170-173
— Hypothesis suggesting 700 km of right in California along northwest-oriented faults; comment
(Gastil, R. G.) 3(2): 84
— Hypothesis suggesting 700 km of right slip in California along northwest-oriented faults; reply
(Howell, D. G.) 4(10): 632-633
— Hypothesis suggesting 700 km of right slip in California along northwest-oriented faults; with discussion
(Howell, D. G.) 3(2): 81-83
— Is the San Andreas a transform fault?
(Hill, M. L.) 2(11): 535-536
— Is the San Andreas a transform fault?; discussions and reply
(Silver, E. A., *et al.*) 3(3): 155-159
— Mapped offset on the right-lateral Kern Canyon Fault, southern Sierra Nevada, California
(Moore, J. G., *et al.*) 6(4): 205-208
— Nature and timing of movement on Hines Creek strand of Denali Fault system, Alaska
(Wahrhaftig, C., *et al.*) 3(8): 463-466
— Offset across the Polochic Fault of Guatemala and Chiapas, Mexico
(Burkart, B.) 6(6): 328-332
— Possible strike-slip faulting in the southern California borderland
(Howell, D. G., *et al.*) 2(2): 93-98
— Possible strike-slip faulting in the southern California borderland; discussion and reply
(Cole, M. R., *et al.*) 3(1): 2-4
— Relation of the tectonics of eastern China to the India-Eurasia collision; application of slip-line field theory to large-scale continental tectonics
(Molnar, P., *et al.*) 5(4): 212-216
— The New York-Alabama Lineament; geophysical evidence for a major crustal break in the basement beneath the Appalachian Basin
(King, E. R., *et al.*) 6(5): 312-318
thrust faults: Compressional faulting of the oceanic crust prior to subduction in the Peru-Chile Trench
(Hussong, D. M., *et al.*) 3(10): 601-604
— Cranmore Cove-Chattanooga fault system; a model for the structure along the Allegheny front in southern Tennessee
(Milici, R. C., *et al.*) 3(3): 111-113
— Nature and regional significance of thrust faulting in the southern Inyo Mountains, eastern California
(Kelley, J. S., *et al.*) 3(9): 524-526
— Nature of the Wind River thrust, Wyoming, from COCORP deep-reflection data and from gravity data
(Smithson, S. B., *et al.*) 6(11): 648-652
— Orientation of underthrusting during latest Cretaceous and earliest Tertiary time, Kodiak Islands, Alaska
(Moore, J. C.) 6(4): 209-213
— Plate tectonics of marginal foreland thrust-fold belts
(Coney, P. J.) 1(3): 131-134
— Radiometric dating of time of thrusting in the disturbed belt of Montana
(Hoffman, J., *et al.*) 4(1): 16-20
— Roberts Mountains thrust; gravity slide or underthrust?; discussion
(Johnson, J. G.) 3(4): 219-220
— South Fork Mountain Schist at Black Butte and Cottonwood Creek, northern California
(Bishop, D. G.) 5(10): 595-599
transform faults: Vema fracture zone transform fault
(Eittreim, S., *et al.*) 3(10): 555-558
faults—distribution
active faults: Environmental and structural implications of Rhode Island seismic events, 1965-1976
(Fisher, J. J.) 6(4): 251-255
— History of reports on selected faults in southern and eastern Wisconsin
(Kuntz, C. S., *et al.*) 4(4): 241-246
fault scarps: Quaternary faulting in Trans-Pecos Texas
(Muehlberger, W. R., *et al.*) 6(6): 337-340
fault zones: Interpretation of aeromagnetic anomalies bearing on the origin of upper Chesapeake Bay and river course changes in the central Atlantic seaboard region; speculations
(Higgins, M. W., *et al.*) 2(2): 73-76
— Interpretation of Chesapeake Bay aeromagnetic anomalies; discussion and reply
(Hansen, H. J.) 2(9): 449-450

— Stafford fault system; structures documenting Cretaceous and Tertiary deformation along the Fall Line in northeastern Virginia
(Mixon, R. B., *et al.*) 5(7): 437-440

faults—effects
cataclasite: Eastern Piedmont fault system; speculations on its extent
(Chapman, J. J.) 6(10): 580-582
mullions: Turtleback surfaces of Death Valley viewed as phenomena of extensional tectonics
(Wright, L. A., *et al.*) 2(2): 53-54

faults—extent
fault zones: Lat 40°N fault zone, Pennsylvania; a new interpretation
(Root, S. I., *et al.*) 5(12): 719-723

faults—mechanics
extension: Triassic-Jurassic faulting in eastern North America; a model based on pre-Triassic structures
(Lindholm, R. C.) 6(6): 365-368
interpretation: Elevation changes preceding the San Fernando earthquake of February 9, 1971
(Castle, R. O., *et al.*) 2(2): 61-66
stick slip: Precursory and coseismic water-pressure variations in stick-slip experiments
(Sundaram, P. N., *et al.*) 4(2): 108-110
theoretical studies: Sinuosity of strike-slip fault traces
(Bridwell, R. J.) 3(11): 630-632

faults—orientation
arcuate faults: Curvature of the San Andreas Fault, California
(Woodford, A. O., *et al.*) 4(9): 573-575
— Curvature of the San Andreas Fault, California; discussion and reply
(Citron, G. P., *et al.*) 5(6): 324-325

faults—patterns
interpretation: Late Cenozoic fault patterns and stress fields in the Great Basin and westward displacement of the Sierra Nevada Block
(Wright, L.) 4(8): 489-494
— Late Cenozoic fault patterns and stress fields in the Great Basin and westward displacement of the Sierra Nevada Block; discussion and reply
(Anderson, R. E., *et al.*) 5(7): 388-392
peripheral faults: Late Cenozoic ring faulting and volcanism in the Coso Range area of California
(Duffield, W. A.) 3(6): 335-338
radial faults: A radial pattern of sea-floor deformation in the southwestern Caribbean Sea
(Christofferson, E., *et al.*) 6(6): 341-344

faults—systems
block structures: Continuation of the highland boundary fault in Ireland
(Max, M. D., *et al.*) 3(4): 206-210
— Earthquakes and block tectonics in the Illinois Basin
(McGinnis, L. D., *et al.*) 2(10): 517-519
— Model for the formation of topographic features of the East Pacific Rise crest
(Rea, D. K.) 3(2): 77-80
— Pliocene-Pleistocene break-up of the Sierra Nevada-White-Inyo Mountains Block and formation of Owens Valley
(Bachman, S. B.) 6(8): 461-463
en echelon faults: Intracontinental plate boundary east of Cape Mendocino, California
(Herd, D. G.) 6(12): 721-725
extent: Eastern Piedmont fault system; speculation on its extent
(Hatcher, R. D., Jr., *et al.*) 5(10): 636-640
rift zones: Basin and range rifting in northern Nevada; clues from a mid-Miocene rift and its subsequent offsets
(Zoback, M. L., *et al.*) 6(2): 111-116
— Geometry of Sierrita Fault and its bearing on tectonic development of the Rio Grande Rift, New Mexico
(Woodward, L. A., *et al.*) 3(3): 114-116
— Geometry of Sierrita Fault and its bearing on tectonic development of the Rio Grande Rift, New Mexico; discussion and reply
(Lins, T. W., *et al.*) 3(7): 357
— Gridded fault patterns in a late Cenozoic and a Paleozoic continental rift
(Ramberg, I. B., *et al.*) 3(4): 201-205
— Microearthquakes along the Dead Sea Rift
(Wu, F. T., *et al.*) 1(4): 159-161
— Paleorifting between the Gregory and Ethiopian rifts
(Cerling, T. E., *et al.*) 5(7): 441-444
— Penrose Conference report; geology of the Rio Grande Graben
(Cordell, L., *et al.*) 3(8): 420-421

Fiji—tectonophysics
plate tectonics: From island arc to oceanic islands; Fiji, southwestern Pacific
(Gill, J. B.) 4(2): 123-126

fission-track dating *see* fission-track dating *under* geochronology

Florida—engineering geology
shorelines: Coastal barrier changes, 1770-1867, Biscayne Bay area, Florida
(Chardon, R. E.) 6(6): 333-336
— Effects of Hurricane Eloise on beach and coastal structures, Florida Panhandle
(Morton, R. A.) 4(5): 277-280
— Effects of Hurricane Eloise on beach and coastal structures, Florida Panhandle; discussion and reply
(Tanner, W. F., *et al.*) 4(10): 633-635
— Effects of Hurricane Eloise on beach and coastal structures, Florida Panhandle; discussion and reply
(Mathewson, C. C., *et al.*) 5(1): 61-63

Florida—environmental geology
geologic hazards: Recent ice age in Florida?; discussion and reply
(Bradley, R. S., *et al.*) 4(4): 197-198
— Return of the ice age and drought in peninsular Florida
(Moran, J. M.) 3(12): 695-696

Florida—sedimentary petrology
reefs: Sclerochronology; a tool for interpreting past environments
(Hudson, J. H., *et al.*) 4(6): 361-364
sedimentary rocks: Previously undescribed carbonate deposits on Key Largo, Florida
(Bain, R. J., *et al.*) 3(3): 137-139
— Previously undescribed carbonate deposits on Key Largo, Florida; discussion
(Steinker, D. C., *et al.*) 3(7): 360

Florida—stratigraphy
changes of level: Pleistocene stratigraphy in southern Florida based on amino acid diagenesis in fossil Mercenaria
(Mitterer, R. M.) 2(9): 425-428
Pleistocene: Pleistocene stratigraphy in southern Florida based on amino acid diagenesis in fossil Mercenaria
(Mitterer, R. M.) 2(9): 425-428
Quaternary: A late Quaternary record of vegetation from Lake Annie, South-central Florida
(Watts, W. A.) 3(6): 344-346

Florida—tectonophysics
sea-floor spreading: Thermal model for some continental margin sedimentary basins and uplift zones
(Long, L. T., *et al.*) 1(2): 87-88

fluid inclusions *see also* inclusions

folds—mechanics
decollement: Plate tectonics of marginal foreland thrust-fold belts
(Coney, P. J.) 1(3): 131-134

folds—orientation
superposed folds: Fold distortion; a new indicator of tectonic transport direction
(Alvarez, W.) 6(11): 657-660

folds—style
anticlines: Finite-element model for possible isostatic rebound in the Grand Canyon
(Sturgul, J. R., *et al.*) 3(4): 169-171

foliation *see also* structural analysis

foliation—genesis
experimental studies: Compositional differentiation in an experimentally deformed salt-mica specimen
(Means, L. D., *et al.*) 2(1): 15-16

foliation—style
cleavage: Formation of spaced cleavage and folds in brittle limestone by dissolution
(Alvarez, W., *et al.*) 4(11): 698-701
slaty cleavage: Dewatering origin of cleavage in light of deformed calcite veins and clastic dikes in Martinsburg Slate, Delaware water gap, New Jersey
(Beutner, E. C., *et al.*) 5(2): 118-122
— Rotation and dewatering during slaty cleavage formation; some new evidence and interpretations
(Alterman, I. B.) 1(1): 33-36
— Slaty cleavage and the dewatering hypothesis; an examination of some critical evidence
(Geiser, P. A.) 3(12): 717-720
— Slaty cleavage and the dewatering hypothesis; an examination of some critical evidence; discussions and reply
(Alterman, I. B., *et al.*) 4(12): 789-794
slip cleavage: Quantitative theory for metamorphic differentiation in development of crenulation cleavage
(Fletcher, R. C.) 5(3): 185-187
— Quantitative theory for metamorphic differentiation in development of crenulation cleavage; discussion and reply
(Durney, D. W., *et al.*) 6(2): 68-69
— "Slip" cleavage caused by pressure solution in a buckle fold
(Groshong, R. H., Jr.) 3(7): 411-413

foraminifera—biostratigraphy
Cretaceous: Late Cretaceous reversal sequence
(Keating, B., *et al.*) 3(2): 73-76
— Late Mesozoic and early Cenozoic sediment cores from the Arctic Ocean
(Clark, D. L.) 2(1): 41-44
— Upper Cretaceous arc-trench gap sedimentation on the Alaska Peninsula
(Mancini, E. A., *et al.*) 6(7): 437-439
planktonic taxa: An estimate of the duration of the faunal change at the Cretaceous-Tertiary boundary
(Kent, D. V.) 5(12): 769-771
— Pacific Pleistocene sediments; planktonic foraminifera dissolution cycles and geochronology
(Thompson, P. R., *et al.*) 2(7): 333-335
— Pliocene closing of the Isthmus of Panama, based on biostratigraphic evidence from nearby Pacific Ocean and Caribbean Sea cores
(Keigwin, L. D., Jr.) 6(10): 630-634
zoning: Cenozoic magnetic time scale in deep-sea cores; completion of the Neogene
(Theyer, F., *et al.*) 2(10): 487-492
— Progress toward reconciliation of Lower Mississippian conodont and foraminiferal zonations
(Brenckle, P., *et al.*) 2(9): 433-436

foraminifera—Globigerinacea
Cenozoic: Geologic significance of coiling direction in the planktonic foraminifera Pulleniatina
(Saito, T.) 4(5): 305-309

foraminifera—Miliolacea
biochemistry: Diagenesis of magnesian calcite; evidence from miliolacean foraminifera
(Towe, K. M., *et al.*) 4(6): 337-339

foraminifera—morphology
affinities: Foraminiferal affinities exhibited by the dinoflagellate Nannoceratopsis Deflandre; discussion
(Evitt, W. R.) 2(12): 582-583
— Foraminiferal affinities exhibited by the dinoflagellate Nannoceratopsis Deflandre; reply
(Haskell, T. R.) 3(8): 476
— Foraminiferal affinities exhibited by the dinoflagellate Nannoceratopsis Deflandre; with discussion
(Haskell, T. R.) 2(12): 579-582

foraminifera—occurrence
sediments: Optimum indices of calcium carbonate dissolution in deep-sea sediments
(Thunell, R. C.) 4(9): 525-528

foraminifera—paleoecology
paleoeclimatology: Arctic Ocean foraminifera abundance and its relationship to equatorial Pacific Ocean solution cycles
(Larson, J. A.) 3(9): 491-492
planktonic taxa: The terminal Cretaceous event; a geologic problem with an oceanographic solution
(Gartner, S., *et al.*) 6(12): 708-712

Formosa *see* Taiwan

fossils *see* appropriate fossil group

fossils, problematic *see* problematic fossils

foundations *see also* rock mechanics

fractures—distribution
spatial analysis: Magnesium metasomatism during hydrothermal alteration of new oceanic crust
(Bloch, S., *et al.*) 6(5): 275-277

fractures—style
extension: Turtleback surfaces of Death Valley viewed as phenomena of extensional tectonics
(Wright, L. A., *et al.*) 2(2): 53-54
joints: Estimation of coal-cleat orientation using surface-joint and photolinear analysis
(Diamond, W. P., *et al.*) 3(12): 687-690
— Subsurface extensions of the Santa Rita-Hanover Axis; a major early Tertiary structure, New Mexico
(Aldrich, M. J., Jr.) 6(6): 373-376

framework silicates *see* framework silicates *under* minerals

France—sedimentary petrology
sedimentation: Rate of lateral migration of adjoining sea-marginal sedimentary environments shown by historical records, Authie Bay, France
(LeFournier, J., *et al.*) 2(10): 497-498

France—structural geology
tectonics: Possible "Caledonian" subduction under the Domnonean domain, North Armorican area
(Lefort, J. P.) 5(9): 523-526

France—tectonophysics
plate tectonics: Possible "Caledonian" subduction under the Domnonean domain, North Armorican area
(Kuijper, R. P., *et al.*) 6(11): 644-646

frost action *see* frost action *under* geomorphology

genesis of ore deposits *see* mineral deposits, genesis

geochemistry—concepts
review: Early theories and hypotheses on pressure-solution-redeposition
(Durney, D. W.) 6(6): 369-372

geochemistry—experimental studies
buffers: Magnesium hydroxychloride; a possible pH buffer in marine evaporite brines?
(Bodine, M. W., Jr.) 4(2): 76-80

geochemistry—methods
automatic data processing: A computer-assisted graphical method for identification and correlation of igneous rock chemistries
(Wright, T. L., *et al.*) 6(1): 16-20
leaching: Observations on the chemical demagnetization of red beds
(Reeve, S. C.) 3(2): 90

geochemistry—processes
dissolution: Destructive diagenesis of carbonate sediments in the eastern Skagerrak, North Sea
(Alexandersson, E. T.) 6(6): 324-327
— Pacific Pleistocene sediments; planktonic foraminifera dissolution cycles and geochronology
(Thompson, P. R., *et al.*) 2(7): 333-335

— Preservation of diatoms in glacial to Holocene deep-sea sediments of the equatorial Pacific
(Mikkelsen, N.) 6(9): 553-555
precipitation: Duration of hydrothermal activity at an oceanic spreading center, Mid-Atlantic Ridge (lat 26°N)
(Scott, R. B., *et al.*) 4(4): 233-236
reduction: Methane production and consumption in anoxic marine sediments
(Barnes, R. O., *et al.*) 4(5): 297-300
geochemistry—properties
solubility: High CO_2 solubilities in mantle magmas
(Wyllie, P. J., *et al.*) 4(1): 21-24
— High CO_2 solubilities in mantle magmas; discussion and reply
(Eggler, D. H., *et al.*) 4(4): 198-200
geochronology *see also* absolute age
geochronology—fission-track dating
apatite: Apatite fission-track dating of a sample from the type Caradoc (Middle Ordovician) Series in England
(Ross, R. J., Jr., *et al.*) 4(8): 505-506
middle Pleistocene: Age of the Bishop Tuff of eastern California as determined by the fission-track method
(Izett, G. A., *et al.*) 4(10): 587-590
moraines: Radiometric evidence for pre-Wisconsin glaciation in the northern Andes
(Herd, D. G., *et al.*) 2(12): 603-604
volcanic ash: Fission-track ages of Pearlette family ash beds; comment
(Boellstorff, J.) 2(1): 21
— Zircon fission-track ages of Pearlette family ash beds in Meade County, Kansas
(Naeser, C. W., *et al.*) 1(2): 93-95
— Zircon fission-track ages of Pearlette family ash beds in Meade County, Kansas; reprint
(Naeser, C. W., *et al.*) 1(4): 187-189
zircon: A fission-track age for the Skaergaard Intrusion and the age of the East Greenland basalts
(Brooks, C. K., *et al.*) 5(9): 539-540
— Age of the Bishop Tuff of eastern California as determined by the fission-track method; discussion and reply
(Swinehart, J. B., *et al.*) 5(11): 648-650
geochronology—methods
comparison: Comment: relative age dating techniques . . .
(White, S. E.) 2(7): 326
— Relative age dating techniques and a late Quaternary chronology, Arikaree Cirque, Colorado
(Carroll, T.) 2(7): 321-325
sclerochronology: Sclerochronology; a tool for interpreting past environments
(Hudson, J. H., *et al.*) 4(6): 361-364
geochronology—paleomagnetism
correlation: Biostratigraphy and magnetostratigraphy of Paleocene terrestrial deposits, San Juan Basin, New Mexico
(Lindsay, E. H., *et al.*) 6(7): 425-429
— Extension of the radiolarian Stylatractus universus as a biostratigraphic datum to the Atlantic Ocean
(Morley, J. J., *et al.*) 6(5): 309-311
lava: Geomagnetic polarity event recorded at 1.1 m.y. on Cobb Mountain, Clear Lake volcanic field, California
(Mankinen, E. A., *et al.*) 6(11): 653-656
reversals: An estimate of the duration of the faunal change at the Cretaceous-Tertiary boundary
(Kent, D. V.) 5(12): 769-771
— Late Cretaceous reversal sequence
(Keating, B., *et al.*) 3(2): 73-76
sediments: Remanent magnetization of modern tidal flat sediments from San Francisco Bay, California
(Graham, S.) 2(5): 223-226
symposia: Late Cenozoic magnetostratigraphy; comparisons with bio-, climato-, and lithozones
(Kukla, G., *et al.*) 3(12): 704-707
geochronology—time scales
Cenozoic: Revised Cenozoic polarity time scale
(Tarling, D. H., *et al.*) 4(3): 133-136
Cretaceous: Dilemma of a Cretaceous time scale and rates of sea-floor spreading
(Baldwin, B., *et al.*) 2(6): 267-270
— Revised magnetic polarity time scale for Late Cretaceous and Cenozoic time
(LaBrecque, J. L., *et al.*) 5(6): 330-335
Neogene: Cenozoic magnetic time scale in deep-sea cores; completion of the Neogene
(Theyer, F., *et al.*) 2(10): 487-492
Ordovician: Subdivision of Ordovician and Silurian time scale using accumulation rates of graptolitic shale
(Churkin, M., Jr., *et al.*) 5(8): 452-456
Phanerozoic: A geological duration chart
(Braziunas, T. F.) 3(6): 342-343
Quaternary: Comparison of the glacial chronology of eastern Baffin Island, East Greenland, and the Camp Century accumulation record
(Andrews, J. T., *et al.*) 2(7): 355-358
geochronology—varves
glacial lakes: Grain-size distribution within glacial varves
(Peach, P. A., *et al.*) 3(1): 43-46
geodesy—surveys
subsidence: Post-earthquake dilatancy recovery
(Scholz, C. H.) 2(11): 551-554
geologic hazards *see also under* engineering geology *under* Gulf Coastal Plain; Mississippi Valley; Rocky Mountains; *see also under* environmental geology *under* Atlantic Coastal Plain; Colorado; Florida; Mississippi Valley; Rhode Island; Rocky Mountains; Utah; Washington
geologic hazards—floods
indicators: Inverse grading as stratigraphic evidence of large floods; discussion and reply
(Fisk, L. H., *et al.*) 2(12): 613-615
— Stratigraphic, morphologic, and pedologic evidence of large floods in humid environments
(Costa, J. E.) 2(6): 301-303
geology—concepts
logic: Induction, deduction, and irrationality in geologic reasoning
(Brown, B. W.) 2(9): 456
— Induction, deduction, and irrationality in geologic reasoning; discussion
(Barlow, J. A.) 2(12): 571-572
geology—education
college-level education: Evaluating professional standards
(Watkins, N. D.) 4(1): 10
— Evaluating professional standards; rating of teaching performance; letter discussion
(Slagle, E. S.) 4(4): 254
geology—nomenclature
ethnogeology: Ethnogeology?; letter
(Kamen-Kaye, M.) 3(3): 100
geology—philosophy
Steno, Nicholas: Nicholas Steno and his geologic paradigm
(Williams, E. G.) 1(3): 112
geology—practice
objectives: A plea for the higher literacy
(Bates, R. L.) 2(4): 203-204
policy: Geology and public policy
(Lundgren, L.) 4(11): 657-660
women: A historical perspective
(Arnold, L. B.) 5(8): 493-494
— Alternative career opportunities for women geoscientists
(Mara, S. J.) 5(8): 504
— American women in geology
(Schwarzer, T. F., *et al.*) 5(8): 493
— Career opportunities for women geoscientists in the petroleum industry
(Schwarzer, T. F., *et al.*) 5(8): 500-501

— Career status and opportunities for women earth scientists in the Geologic Division of the U. S. Geological Survey
(Davis, R. E.) 5(8): 495-497
— Careers for women in mining; a Canadian overview
(Mioduszewska, B.) 5(8): 498-499
— Women in academia; students and professors
(Crawford, M. L., *et al.*) 5(8): 502-503
geomorphology *see also* glacial geology
geomorphology—erosion features
fault scarps: Patterns of displacement along the Wasatch Fault
(Hamblin, W. K.) 4(10): 619-622
scablands: New evidence for pre-Wisconsin flooding in the channeled scabland of eastern Washington
(Patton, P. C., *et al.*) 6(9): 567-571
geomorphology—fluvial features
alluvial fans: Stratigraphic, morphologic, and pedologic evidence of large floods in humid environments
(Costa, J. E.) 2(6): 301-303
drainage basins: The probabilistic-topologic approach to drainage-basin geomorphology
(Shreve, R. L.) 3(9): 527-529
drainage patterns: Initial bifurcation process in natural channel networks
(Abrahams, A. D.) 3(6): 307-308
— Line intersection method for estimating drainage density
(Mark, D. M.) 2(5): 235-236
floodplains: The incomplete flood plain
(Tanner, W. F.) 2(2): 105-106
— The incomplete flood plain, revisited; discussion and reply
(Garner, H. F., *et al.*) 2(6): 280-281
meanders: Paleogeomorphic and paleoclimatic implications of "preglacial" meanders in the Cincinnati area
(Dury, G. H., *et al.*) 3(10): 585-586
stream capture: Channel responses to artificial stream capture, Death Valley, California
(Dzurisin, D.) 3(6): 309-312
streams: Impact of mining gravel from urban stream beds in the southwestern United States
(Bull, W. B., *et al.*) 2(4): 171-174
terraces: Terraces of Douglas Creek, northwestern Colorado; an example of episodic erosion
(Womack, W. R., *et al.*) 5(2): 72-76
geomorphology—frost action
patterned ground: Needle ice and wind in the White Mountains of California
(Beaty, C. B.) 2(11): 565-567
geomorphology—impact features
interpretation: New evidence for impact origin of the Bushveld Complex, South Africa
(Rhodes, R. C.) 3(10): 549-554
meteor craters: El'gygytgyn; probably world's largest meteorite crater
(Dietz, R. S., *et al.*) 4(7): 391-392
— El'gygytgyn; probably world's largest meteorite crater; discussion and reply
(Pike, R. J., *et al.*) 5(5): 262-263
— New evidence for impact origin of the Bushveld Complex, South Africa
(Rhodes, R. C.) 3(10): 549-554
possibilities: Simulated "true color" images from ERTS data; comment
(Sales, J. K.) 2(10): 496
geomorphology—landform description
depressions: Depressions surrounding volcanic fields; a reflection of underlying batholiths?
(Heiken, G.) 4(9): 568-572
patterns: Bison trails and their geologic significance
(Clayton, L.) 3(9): 498-500
— Bison trails and their geological significance; discussion and reply
(Babcock, E. A., *et al.*) 4(1): 4-6
turtlebacks: Turtleback surfaces of Death Valley viewed as phenomena of extensional tectonics
(Wright, L. A., *et al.*) 2(2): 53-54
geomorphology—mass movements
creep: Slow movement of earth under tropical rain forest conditions
(Lewis, L. A.) 2(1): 9-10
earthflows: Earthflows in Franciscan melange, Van Duzen River basin, California
(Kelsey, H. M.) 6(6): 361-364
landslides: Erosion caused by intense rainfall in a small catchment in New York State
(Renwick, W. H.) 5(6): 361-364
— Preparation and use of isopleth maps of landslide deposits
(Wright, R. H., *et al.*) 2(10): 483-485
— Preparation and use of isopleth maps of landslide deposits; discussion and reply
(Vitek, J. D., *et al.*) 3(4): 217-218
geomorphology—methods
photogeology: Reoccupying unmarked camera stations for geological observations
(Harrison, A. E.) 2(9): 469-471
geomorphology—processes
erosion: Channel changes
(Emmett, W. W.) 2(6): 271-272
— Denudation of Taiwan Island since the Pliocene Epoch
(Li, Y. H.) 4(2): 105-107
— Estimated erosion rates on Mount Rainier, Washington
(Mills, H. H.) 4(7): 401-406
— Finite-element model for possible isostatic rebound in the Grand Canyon
(Sturgul, J. R., *et al.*) 3(4): 169-171
— Flooding in Big Thompson River, Colorado, tributaries, controls on channel erosion and estimates of recurrence interval
(Balog, J. D.) 6(4): 200-204
— Gully erosion, northwestern Colorado; a threshold phenomenon
(Patton, P. C., *et al.*) 3(2): 88-89
— Lateral erosion and overbank deposition on the Mississippi River in Louisiana caused by 1973 flooding
(Kesel, R. H., *et al.*) 2(9): 461-464
— Monitoring the coastal environment
(Morisawa, M., *et al.*) 2(8): 385-388
— Origin of Mojave Desert dust plumes photographed from space
(Nakata, J. K., *et al.*) 4(11): 644-648
— Stresses induced by the addition or removal of overburden and associated thermal effects
(Haxby, W. F., *et al.*) 4(3): 181-184
sedimentation: Impact of Hurricane Belle on Assateague Island washover
(Fisher, J. S., *et al.*) 5(12): 765-768
weathering: Insolation warmed over
(Rice, A.) 4(1): 61-62
— Insolation warmed over; discussion
(Garner, H. F.) 4(5): 264
— Insolation warmed over; discussion and reply
(Winkler, E. M., *et al.*) 5(3): 188-190
geomorphology—shore features
barriers: Coastal barrier changes, 1770-1867, Biscayne Bay area, Florida
(Chardon, R. E.) 6(6): 333-336
deltas: Location of major deltas
(Audley-Charles, M. G., *et al.*) 5(6): 341-344
— Satellite observation of the subaerial growth of the Atchafalaya Delta, Louisiana
(Rouse, L. J., Jr., *et al.*) 6(7): 405-408
— Tidal effects on the formation of pillow lava/hyaloclastite deltas
(Furnes, H., *et al.*) 2(8): 381-384
evolution: Correlation of tectonically deformed shorelines on the southern Atlantic Coastal Plain
(Winker, C. D., *et al.*) 5(2): 123-127
sand ridges: Anatomy of a shoreface-connected sand ridge on the New Jersey shelf; implications for the genesis of the shelf surficial sand sheet
(Stahl, L., *et al.*) 2(3): 117-120
spits: Rate of lateral migration of adjoining sea-marginal sedimentary environments shown by historical records, Authie Bay, France
(LeFournier, J., *et al.*) 2(10): 497-498

terraces: Deep eustatic terrace levels; further speculations
(Pratt, R. M., *et al.*) 2(3): 155-159

geomorphology—solution features
karst: Local submarine salt-karst formation on the Hellenic outer ridge, eastern Mediterranean
(Belderson, R. H., *et al.*) 6(12): 716-720
sinkholes: Stratigraphy and origin of surficial deposits in sinkholes in South-central Indiana
(Hall, R. D.) 4(8): 507-509

geomorphology—volcanic features
ash flows: Spectacular mobility of ash flows around Aniakchak and Fisher calderas, Alaska
(Miller, T. P., *et al.*) 5(3): 173-176
volcanoes: Mount Baker eruptions
(Easterbrook, D. J.) 3(12): 679-682

geophysical methods—electrical methods
resistivity: Deep exploration of an East-Coast Triassic basin using electrical resistivity
(Ackermann, H. D., *et al.*) 4(3): 137-140
self-potential methods: Self-potential prospecting in the deep oceans
(Brewitt-Taylor, C. R.) 3(9): 541-542

geophysical methods—methods
techniques: Audio-frequency magnetotelluric and gravity traverse across the crest of the Purcell Anticlinorium, northwestern Montana
(Wynn, J. C., *et al.*) 5(5): 309-312

geophysical surveys *see* acoustical surveys *under* geophysical surveys *under* Arctic Ocean; Bahamas; Mediterranean region; Mexico; Pacific Coast; Pacific Ocean; Taiwan; *see* electrical surveys *under* geophysical surveys *under* North Carolina; *see* gravity surveys *under* geophysical surveys *under* Colorado; Indonesia; New Mexico; *see* magnetic surveys *under* geophysical surveys *under* Appalachians; Atlantic Coastal Plain; Basin and Range Province; Colorado Plateau; Indian Ocean; Wyoming; *see* seismic surveys *under* geophysical surveys *under* Atlantic Ocean; Gulf of Mexico; Mediterranean Sea; Pacific Ocean; Rhode Island; Western U.S.; *see* surveys *under* geophysical surveys *under* Appalachians; Atlantic Ocean; Minnesota; Montana; Pacific Ocean; Papua New Guinea; *see also* geophysical methods

geophysics *see also* deformation; engineering geology

geophysics—concepts
stress: Stresses induced by the addition or removal of overburden and associated thermal effects
(Haxby, W. F., *et al.*) 4(3): 181-184

geophysics—experimental studies
deformation: Hornblende deformation features
(Rooney, T. P., *et al.*) 3(7): 364-366
phase equilibria: Stability of dolomite in a hydrous mantle, with implications for the mantle solidus
(Eggler, D. H.) 6(7): 397-400
quartz: Structure and significance of planar deformation features in synthetic quartz
(Twiss, R. J.) 2(7): 329-332

geophysics—theoretical studies
mantle: Collapse of the Hudson Bay ice center and glacio-isostatic rebound
(Andrews, J. T., *et al.*) 4(2): 73-75

Georgia—structural geology
faults: Belair fault zone; evidence of Tertiary fault displacement in eastern Georgia
(Prowell, D. C., *et al.*) 6(11): 681-684

geosynclines *see also* orogeny

geosynclines—evolution
Cordilleran Geosyncline: The Siberian connection; a case for Precambrian separation of the North American and Siberian cratons
(Sears, J. W., *et al.*) 6(5): 267-270

geosynclines—genesis
Cordilleran Geosyncline: Deep-Sea drilling for landlubber geologists; the Southwest Pacific, and accordion plate tectonics analog for the Cordilleran Geosyncline
(Churkin, M., Jr.) 2(7): 339-342
interpretation: Conceptual model for the block-fault origin of the North American Atlantic continental margin geosyncline
(Sheridan, R. E.) 2(9): 465-468

geosynclines—processes
sedimentation: Diagenetic dolomite formation related to Paleozoic paleogeography of the Cordilleran miogeocline in Nevada
(Dunham, J. B., *et al.*) 6(9): 556-559

geotechnics *see* engineering geology

geothermal energy *see also under* economic geology *under* California; Hawaii; New Mexico

geothermal gradient *see* geothermal gradient *under* heat flow

glacial geology *see also* geomorphology

glacial geology—ancient ice ages
Ordovician: Late Ordovician-Early Silurian glaciation and the Ordovician-Silurian boundary in the northern Canadian Cordillera
(Lenz, A. C.) 4(5): 313-317
— Late Ordovician-Early Silurian glaciation and the Ordovician-Silurian boundary in the northern Canadian Cordillera; discussions and replies
(Johnson, J. G., *et al.*) 4(12): 795-797
Paleozoic: Quartz sand surface textural evidence for a glacial origin of the Squantum "tillite," Boston Basin, Massachusetts
(Rehmer, J. A., *et al.*) 2(8): 413-415
— Quartz sand surface textural evidence for a glacial origin of the Squantum "Tillite," Boston Basin, Massachusetts; discussions and reply
(Stuart, C. J., *et al.*) 3(3): 153-155
Proterozoic: Huronian glaciation and polar wander from the Gowganda Formation, Ontario
(Symons, D. T. A.) 3(6): 303-306
— Paleolatitude of glaciogenic upper Precambrian Rapitan Group and the use of tillites as chronostratigraphic marker horizons
(Morris, W. A.) 5(2): 85-88
— Paleolatitude of glaciogenic upper Precambrian Rapitan Group and the use of tillites as chronostratigraphic marker horizons; discussion and reply
(Williams, G. E., *et al.*) 6(1): 4-5
— Possible galactic causes for geologic events; comment
(Visser, J. N. J.) 2(6): 279

glacial geology—glacial features
chattermarks: Chattermark trails on heavy minerals in glacial sediments
(Gravenor, C. P., *et al.*) 6(1): 61-63
— Glacial deposits identified by chattermark trails in detrital garnets
(Folk, R. L.) 3(8): 473-475
— Glacial deposits identified by chattermark trails in detrital garnets; discussion and reply
(Bull, P. A., *et al.*) 5(4): 248-249
— Glacial deposits identified by chattermark trails in detrital garnets; discussion and reply
(Rocha-Campos, A. C., *et al.*) 6(1): 8-10
kettles: Crater or kettle? A geophysical study
(Hammer, S., *et al.*) 3(3): 145-146
moraines: Ribbed moraine-drumlin transition belt, St. Lawrence Valley, New York
(Carl, J. D.) 6(9): 562-566

glacial geology—glaciation
age: Radiometric evidence for pre-Wisconsin glaciation in the northern Andes
(Herd, D. G., *et al.*) 2(12): 603-604
— Radiometric evidence for pre-Wisconsin glaciation in the northern Andes; discussion
(Garner, H. F.) 3(5): 230-231
— Weathering rinds as a relative-age criterion; application to subdivision of glacial deposits in the Cascade Range
(Porter, S. C.) 3(3): 101-104
deglaciation: Bedrock control of ice-marginal positions in central New York
(Cadwell, D. H.) 6(5): 278-280
— Collapse of the Hudson Bay ice center and glacio-isostatic rebound
(Andrews, J. T., *et al.*) 4(2): 73-75

— Eustatic amplitude variations and world glacial changes
(Morner, N. A.) 3(3): 109-110
— Faulting, fracturing, and seismicity as functions of glacio-isostasy in Fennoscandia
(Moerner, N. A.) 6(1): 41-45
— Greenland's rapid postglacial emergence; a result of ice-water gravitational attraction
(Clark, J. A.) 4(5): 310-312
— Greenland's rapid postglacial emergence; a result of ice-water gravitational attraction; discussion and reply
(Tapscott, C., *et al.*) 4(8): 452-454
— Support for a stable late Wisconsin ice margin (14,000 to ≈9000 B.P.); a test based on glacial rebound
(Andrews, J. T.) 3(11): 617-620
deposition: Composition sorting of topographically high Tennessee River gravels; a glacial hypothesis
(Kaye, J. M.) 2(1): 45-47
— Compositional sorting of topographically high Tennessee River gravels; a glacial hypothesis; discussion and reply
(McSaveney, E. R., *et al.*) 2(6): 281-282
— Pre-Twocreekan age of the type Valders Till, Wisconsin
(Mickelson, D. M., *et al.*) 3(10): 587-590
erosion: A case against deep erosion of shields by ice sheets
(Sugden, D. E.) 4(10): 580-582
— Erosion of shields by ice sheets; discussion
(Padgham, W. A.) 5(7): 395
— Rates of Quaternary glacial erosion and corrie formation, Marie Byrd Land, Antarctic
(Andrews, J. T., *et al.*) 1(2): 75-80
extent: Proposed extent of late Wisconsin Laurentide ice on eastern Baffin Island
(Miller, G. H., *et al.*) 2(3): 125-130
— Quaternary glaciations and environments of northern Isla Chiloe, Chile
(Heusser, C. J., *et al.*) 5(5): 305-308
— Radiocarbon dating of the last glaciation in Peru
(Mercer, J. H., *et al.*) 5(10): 600-604
geochronology: Comparison of the glacial chronology of eastern Baffin Island, East Greenland, and the Camp Century accumulation record
(Andrews, J. T., *et al.*) 2(7): 355-358
— Glacial chronology of Baffin Island, East Greenland, and Camp Century; discussion and reply
(Funder, S., *et al.*) 2(11): 522
ice movement: Pre-Twocreekan age of the type Valders Till, Wisconsin
(Stieglitz, R. D., *et al.*) 6(3): 136
possibilities: Recent ice age in Florida?; discussion and reply
(Bradley, R. S., *et al.*) 4(4): 197-198
— Return of the ice age and drought in peninsular Florida
(Moran, J. M.) 3(12): 695-696

glacial geology—glaciers
ice movement: Anomalous local glacier activity, Baffin Island, Canada; paleoclimatic implications
(Miller, G. H.) 4(8): 502-504

glaciation *see* glaciation *under* glacial geology

glaciers *see under* glacial geology

glossaries *see also* lexicons

granite *see also under* granite-granodiorite family *under* igneous rocks

granodiorite *see under* granite-granodiorite family *under* igneous rocks

Graptolithina—biostratigraphy
zoning: Subdivision of Ordovician and Silurian time scale using accumulation rates of graptolitic shale
(Churkin, M., Jr., *et al.*) 5(8): 452-456

gravel *see* gravel *under* clastic sediments *under* sediments; *see* gravel *under* economic geology *under* Western U.S.

gravity surveys *see under* geophysical surveys *under* Colorado; Indonesia; New Mexico

Great Basin—structural geology
neotectonics: Late Cenozoic fault patterns and stress fields in the Great Basin and westward displacement of the Sierra Nevada Block
(Wright, L.) 4(8): 489-494
— Late Cenozoic fault patterns and stress fields in the Great Basin and westward displacement of the Sierra Nevada Block; discussion and reply
(Anderson, R. E., *et al.*) 5(7): 388-392

Great Britain—structural geology
tectonics: Sub-Cenozoic geology of the British continental margin (lat 50°N to 57°N) and the reassembly of the North Atlantic late Paleozoic supercontinent
(Bailey, R. J.) 3(10): 591-594

Great Lakes region—sedimentary petrology
sedimentary rocks: Relationships of till to bed rock in the Lake Superior region
(Dell, C. I.) 3(10): 563-564

Great Plains—geochronology
Quaternary: Fission-track ages of Pearlette family ash beds; comment
(Boellstorff, J.) 2(1): 21

Great Plains—geomorphology
landform description: Bison trails and their geologic significance
(Clayton, L.) 3(9): 498-500
— Bison trails and their geological significance; discussion and reply
(Babcock, E. A., *et al.*) 4(1): 4-6

Great Plains—tectonophysics
plate tectonics: Igneous cumulates of the Wichita Province and their tectonic implications
(Powell, B. N., *et al.*) 5(1): 52-56

Greece—tectonophysics
plate tectonics: Emplacement model for some "Tethyan" ophiolites
(Smith, A. G., *et al.*) 4(11): 653-656

Greenland—geochronology
Paleogene: A fission-track age for the Skaergaard Intrusion and the age of the East Greenland basalts
(Brooks, C. K., *et al.*) 5(9): 539-540

Greenland—stratigraphy
changes of level: Greenland's rapid postglacial emergence; a result of ice-water gravitational attraction
(Clark, J. A.) 4(5): 310-312
— Greenland's rapid postglacial emergence; a result of ice-water gravitational attraction; discussion and reply
(Tapscott, C., *et al.*) 4(8): 452-454
— Greenland's rapid postglacial emergence; a result of ice-water gravitational attraction; discussion and reply
(Tanner, W. F., *et al.*) 4(12): 797-798

Greenland—structural geology
tectonics: Granitoid sheets, thrusting, and Archean crustal thickening in West Greenland
(Myers, J. S.) 4(5): 265-268

Greenland—tectonophysics
isostasy: Greenland's rapid postglacial emergence; a result of ice-water gravitational attraction
(Clark, J. A.) 4(5): 310-312
— Greenland's rapid postglacial emergence; a result of ice-water gravitational attraction; discussion and reply
(Tapscott, C., *et al.*) 4(8): 452-454
— Greenland's rapid postglacial emergence; a result of ice-water gravitational attraction; discussion and reply
(Tanner, W. F., *et al.*) 4(12): 797-798
plate tectonics: Granitoid sheets, thrusting, and Archean crustal thickening in West Greenland
(Myers, J. S.) 4(5): 265-268

ground water *see also* hydrogeology; hydrology

ground water—aquifers
diagenesis: Calcitization of Edwards Group dolomites in the Balcones fault zone aquifer, South-central Texas
(Abbott, P. L.) 2(7): 359-362

Guatemala—geophysical surveys
remote sensing: Caribbean-Americas plate boundary in Guatemala and southern Mexico as seen on Skylab IV orbital photography
(Muehlberger, W. R., *et al.*) 3(5): 232-235

Guatemala—seismology
earthquakes: Fault movement (afterslip) following the Guatemala earthquake of February 4, 1976
(Bucknam, R. C., *et al.*) 6(3): 170-173

Guatemala—structural geology
neotectonics: Fault movement (afterslip) following the Guatemala earthquake of February 4, 1976
(Bucknam, R. C., *et al.*) 6(3): 170-173

Guatemala—tectonophysics
plate tectonics: Offset across the Polochic Fault of Guatemala and Chiapas, Mexico
(Burkart, B.) 6(6): 328-332

Guatemala—volcanology
Fuego: Scavenging of volcanic aerosol by ash; atmospheric and volcanologic implications
(Rose, W. I., Jr.) 5(10): 621-624

Gulf Coastal Plain—economic geology
energy sources: Geochemistry of geopressured geothermal waters from the Frio Clay in the Gulf Coast region of Texas
(Kharaka, Y. K., *et al.*) 5(4): 241-244

Gulf Coastal Plain—engineering geology
geologic hazards: Effects of Hurricane Eloise on beach and coastal structures, Florida Panhandle
(Morton, R. A.) 4(5): 277-280
— Effects of Hurricane Eloise on beach and coastal structures, Florida Panhandle; discussion and reply
(Tanner, W. F., *et al.*) 4(10): 633-635
— Effects of Hurricane Eloise on beach and coastal structures, Florida Panhandle; discussion and reply
(Mathewson, C. C., *et al.*) 5(1): 61-63

Gulf Coastal Plain—environmental geology
land use: Mapping the physical environment in economic terms
(Mathewson, C. C., *et al.*) 3(11): 627-629
— Mapping the physical environment in economic terms; discussions and reply
(Kerr, R. S., *et al.*) 4(5): 260-264

Gulf of California—tectonophysics
plate tectonics: Detailed study of relative plate motion in the Gulf of California
(Sharman, G., *et al.*) 4(4): 206-210

Gulf of Mexico—environmental geology
pollution: Baseline concentrations of hydrocarbons in barrier-island quartz sand, northeastern Gulf of Mexico
(Palacas, J. G., *et al.*) 4(2): 81-84

Gulf of Mexico—geophysical surveys
seismic surveys: Deep seismic reflection results from the Gulf of Mexico
(Ladd, J. W., *et al.*) 4(6): 365-368
— Role of canyons in the growth of the Campeche Escarpment
(Lindsay, J. F., *et al.*) 3(9): 533-536

Gulf of Mexico—oceanography
ocean floors: Role of canyons in the growth of the Campeche Escarpment
(Lindsay, J. F., *et al.*) 3(9): 533-536

Gulf of Mexico—stratigraphy
continental drift: Permian-Triassic continental configurations and the origin of the Gulf of Mexico
(Van der Voo, R., *et al.*) 4(3): 177-180
— Permian-Triassic continental configurations and the origin of the Gulf of Mexico; discussion
(Holden, J. C.) 4(6): 324-325
— Permian-Triassic continental configurations and the origin of the Gulf of Mexico; discussion and reply
(Rod, E., *et al.*) 4(11): 703
Quaternary: Optimum indices of calcium carbonate dissolution in deep-sea sediments
(Thunell, R. C.) 4(9): 525-528

Guyana—economic geology
diamonds: Possible origin of diamonds in the Guiana Shield; comment
(Schonberger, H., *et al.*) 2(10): 474-475
— Proposed origin for Guianian diamonds
(Reid, A. R.) 2(2): 67-68
— Proposed origin for Guianian diamonds; comment
(Hastings, D. A.) 2(10): 475-476
— Proposed origin for Guianian diamonds; discussions and reply
(Leo, G. W., *et al.*) 2(7): 336-338
— Proposed origin for Guianian diamonds; reply
(Reid, A. R.) 2(10): 476

halides *see* halides *under* minerals

Hawaii—economic geology
geothermal energy: Hydrothermal alteration of basalts from Hawaii Geothermal Project Well-A, Kilauea, Hawaii
(Stone, C., *et al.*) 6(7): 401-404

Hawaii—tectonophysics
isostasy: Isostatic models of the February 1969 east rift eruption of Kilauea
(Goles, G. G.) 4(12): 783-786
plate tectonics: Kana Keoki fracture zone; interaction with the Hawaiian Ridge
(Handschumacher, D. W., *et al.*) 3(1): 25-28

Hawaii—volcanology
Kilauea: Tragic base surge in 1790 at Kilauea volcano
(Swanson, D. A., *et al.*) 1(2): 83-86

heat flow *see* heat flow *under* geophysical surveys *under* Montana; New Mexico; *see also under* tectonophysics *under* Japan Sea; Rocky Mountains

heat flow—geothermal gradient
concepts: A model for the development of thin overthrust sheets of crystalline rocks
(Armstrong, R. L., *et al.*) 2(1): 35-40

heat flow—regional patterns
heat-flow units: Regional geotherms and lithospheric thickness
(Chapman, D. S., *et al.*) 5(5): 265-268

heat flow—theoretical studies
heat flux: Heat loss from the Earth; new estimate
(Williams, D. L., *et al.*) 2(7): 327-328

heavy minerals *see also* placers; titanium

Himalayas—geochronology
Oligocene: Rb-Sr systematics in granite from central Nepal (Manaslu); significance of the Oligocene age and high $^{87}Sr/^{86}Sr$ ratio in Himalayan Orogeny
(Hamet, J., *et al.*) 4(8): 470-472

Holocene *see* Holocene *under* geochronology *under* Colorado; *see also under* stratigraphy *under* Arctic region; Bering Sea

Holocene—stratigraphy
chronostratigraphy: Time-stratigraphic nomenclature for the Holocene Epoch
(Hopkins, D. M.) 3(1): 10

Honduras—stratigraphy
Cretaceous: Paleomagnetic results from Cretaceous sediments in Honduras; tectonic implications
(Gose, W. A., *et al.*) 5(8): 505-508
— Paleomagnetic results from Cretaceous sediments in Honduras; tectonic implications
(Wilson, H. H., *et al.*) 6(7): 440-447

hydrocarbons *see under* organic materials

hydrogeology *see also* ground water; hydrology

hydrogeology—symposia
ground water: Penrose Conference report; Water and carbonate rocks
(Freeman, T. (convener), *et al.*) 2(4): 179-180
statistical methods: Penrose Conference report; Geostatistical concepts and stochastic methods in hydrogeology
(Freeze, R. A., *et al.*) 6(5): 297-298

hydrology *see also* ground water; hydrogeology

hydrology—precipitation
anomalies: Recent ice age in Florida?; discussion and reply
(Bradley, R. S., *et al.*) 4(4): 197-198
hydrology—rivers and streams
conservation: A reverence for rivers
(Leopold, L. B.) 5(7): 429-430
gauging: Estimated erosion rates on Mount Rainier, Washington
(Mills, H. H.) 4(7): 401-406
hydrology—surveys
Colorado: Colorado Bigh Thompson flood; geologic evidence of a rare hydrologic event
(Costa, J. E.) 6(10): 617-620
— Flooding in Big Thompson River, Colorado, tributaries, controls on channel erosion and estimates of recurrence interval
(Balog, J. D.) 6(4): 200-204
hydrothermal alteration *see under* processes *under* metasomatism
Iceland—geomorphology
shore features: Tidal effects on the formation of pillow lava/hyaloclastite deltas
(Furnes, H., *et al.*) 2(8): 381-384
ichnofossils—biogeography
occurrence: Possible sprigginid worm and a new trace fossil from the Nama Group, South West Africa
(Germs, G. J. B.) 1(2): 69-70
ichnofossils—taxonomy
identification: Pseudofossils; a plea for caution
(Cloud, P.) 1(3): 123-127
— Pseudofossils; a plea for caution; comment
(Stinchcomb, B. L.) 2(1): 25
Idaho—tectonophysics
crust: Interpretation of a gravity profile across the western Snake River plain, Idaho
(Mabey, D. R.) 4(1): 53-55
igneous rocks *see also* magmas; metamorphic rocks; metasomatism; phase equilibria
igneous rocks—alkali basalt family
trace elements: Evolution of the mantle; geochemical evidence from alkali basalt
(Sun, S. S., *et al.*) 3(6): 297-302
— Evolution of the mantle; geochemical evidence from alkali basalt; discussion and reply
(Gill, J. B., *et al.*) 4(10): 625-631
— Kaersutites, suboceanic low-velocity zone, and the origin of mid-oceanic ridge basalts
(Basu, A. R., *et al.*) 5(6): 365-368
igneous rocks—alkalic composition
geochemistry: Subduction of the Nazca Plate beneath central Peru
(James, D. E.) 6(3): 174-178
magnetic properties: Paleomagnetism of the Beemerville (New Jersey) alkaline complex
(Proko, M. S., *et al.*) 1(4): 185-186
igneous rocks—andesite-rhyolite family
andesite: Andesite in oceanic regions
(Stewart, D. C., *et al.*) 3(10): 565-568
— Andesite in oceanic regions; discussion and reply
(Chayes, F., *et al.*) 4(1): 9-10
genesis: Chemical and isotopic constraints on the origin of low-silica latite and andesite from the Andes of central Peru
(Noble, D. C., *et al.*) 3(9): 501-504
— Magma contamination within the volcanic pile; origin of andesite and dacite
(Eichelberger, J. C.) 2(1): 29-33
— Magma contamination within the volcanic pile: origin of andesite and decite; discussion and reply
(Millhollen, G. L., *et al.*) 3(4): 164-168
geochemistry: Strontium, rubidium, potassium, and calcium variations in Quaternary lavas, Crater Lake, Oregon, and their residual glasses
(Noble, D. C., *et al.*) 2(4): 187-190
rhyolite: K-Ar ages of Pleistocene rhyolitic volcanism in the Coso Range, California
(Lanphere, M. A., *et al.*) 3(6): 339-341
trace elements: Rare-earth partitioning between hornblende and dacitic liquid and implications for the genesis of trondhjemitic-tonalitic magmas
(Arth, J. G., *et al.*) 4(9): 534-536
igneous rocks—basalt family
alteration: Progressive weathering of submarine basalt with age; further evidence of sea-floor spreading
(Salisbury, M. H., *et al.*) 1(2): 63-64
basalt: Tholeiitic basalt ridge in the Peru Trench
(Kulm, L. D., *et al.*) 1(1): 11-14
composition: Lavas from Niuafo'ou Island, Tonga, resemble ocean-floor basalts
(Reay, A., *et al.*) 2(12): 605-606
geochemistry: Magnesium metasomatism during hydrothermal alteration of new oceanic crust
(Bloch, S., *et al.*) 6(5): 275-277
igneous rocks—calc-alkalic composition
genesis: Melting products of olivine tholeiite basalt in subduction zones
(Stern, C. R.) 2(5): 227-230
igneous rocks—classification
criticism: IUGS classification of granitic rocks; a critique
(Lyons, P. C.) 4(7): 425-426
— IUGS classification of granitic rocks; a critique; discussion
(Brooks, E. R.) 5(11): 653-654
— IUGS classification of granitic rocks; a critique; discussion and reply
(Bateman, P. C.) 5(4): 252-255
igneous rocks—diorite family
trondhjemite: Generation of trondhjemitic-tonalitic liquids and Archean bimodal trondhjemite-basalt suites
(Barker, F., *et al.*) 4(10): 596-600
igneous rocks—distribution
patterns: Paleosubduction geometries inferred from Cretaceous and Tertiary magmatic patterns in southwestern North America
(Keith, S. B.) 6(9): 516-521
igneous rocks—gabbro family
anorthosite: Evaporites as precursors of massif anorthosite
(Gresens, R. L.) 6(1): 46-50
— Evaporites as precursors of massif anorthosite
(Valley, J. W., *et al.*) 6(10): 582-585
complexes: Igneous cumulates of the Wichita Province and their tectonic implications
(Powell, B. N., *et al.*) 5(1): 52-56
igneous rocks—geochemistry
phase equilibria: Peridotite, kimberlite, and carbonatite explained in the system CaO-MgO-SiO_2-CO_2
(Wyllie, P. J., *et al.*) 3(11): 621-624
igneous rocks—geochronology
Neogene: Episodic volcanism in the central Oregon Cascade Range; confirmation and correlation with the Snake River plain; discussion
(Armstrong, R. L.) 3(7): 356-357
igneous rocks—granite-granodiorite family
alaskite: Setting of alaskite bodies in the northwestern Adirondacks, New York
(Foose, M. P., *et al.*) 5(2): 77-80
genesis: Experimental generation of cordierite- or garnet-bearing granitic liquids from a pelitic composition
(Green, T. H.) 4(2): 85-88
granite: Rb-Sr systematics in granite from central Nepal (Manaslu); significance of the Oligocene age and high $^{87}Sr/^{86}Sr$ ratio in Himalayan Orogeny
(Hamet, J., *et al.*) 4(8): 470-472
granodiorite: The Cooma Granodiorite, Australia; an example of in situ crustal anatexis?
(Flood, R. H., *et al.*) 6(2): 81-84
igneous rocks—identification
geochemistry: A computer-assisted graphical method for identification and correlation of igneous rock chemistries
(Wright, T. L., *et al.*) 6(1): 16-20

igneous rocks—lamprophyre and carbonatite family
lamprophyre: High-viscosity "conglomerate" channel deposits in Tertiary lamprophyre sill, Sacramento Mountains, New Mexico
(Asquith, G. B.) 1(4): 149-151
igneous rocks—mafic composition
geochemistry: Petrology and geochemistry of mafic rocks from the Cayman Trench; evidence for spreading
(Perfit, M. R.) 5(2): 105-110
occurrence: Sheeted dikes, gabbro, and pillow basalt in flysch of coastal southern Alaska
(Tysdal, R. G., *et al.*) 5(6): 377-383
igneous rocks—petrology
interpretation: New evidence for impact origin of the Bushveld Complex, South Africa
(Rhodes, R. C.) 3(10): 549-554
igneous rocks—plutonic rocks
genesis: Plutonic zones in the Peninsular Ranges of southern California and northern Baja California
(Gastil, R. G.) 3(7): 361-363
— Plutonic zones in the Peninsular Ranges of southern California and northern Baja California; discussion and reply
(Brown, B. W., *et al.*) 4(1): 9
geochemistry: Chemical trends across Cretaceous batholithic rocks of southern California
(Baird, A. K., *et al.*) 2(10): 493-495
— Fractionation of rare-earth elements in the Tuolumne Intrusive Series, Sierra Nevada Batholith, California
(Frey, F. A., *et al.*) 6(4): 239-242
— Plutonic zones in the Peninsular Ranges of southern California and northern Baja California; discussion and reply
(Baird, A. K., *et al.*) 3(12): 676-677
igneous rocks—pyroclastics and glasses
classification: Mount Pelee, Martinique; a pattern of alternating eruptive styles
(Roobol, M. J., *et al.*) 4(9): 521-524
ignimbrite: Products of ignimbrite eruptions
(Sparks, R. S. J., *et al.*) 1(3): 115-118
— The ignimbrite source problem; significance of a co-ignimbrite lag-fall deposit
(Wright, J. V., *et al.*) 5(12): 729-732
pumice: The ignimbrite problem; significance of a co-ignimbrite lag-fall deposit
(Lock, B. E., *et al.*) 6(5): 260
pyroclastics: Tragic base surge in 1790 at Kilauea volcano
(Swanson, D. A., *et al.*) 1(2): 83-86
tuff: Ash-flow fissure vent in West-central Nevada
(Ekren, E. B., *et al.*) 4(4): 247-251
— Eureka Valley Tuff, East-central California and adjacent Nevada
(Noble, D. C., *et al.*) 2(3): 139-142
volcanic ash: Deep-sea evidence for distribution of tephra from the mixed magma eruption of the Soufriere on St. Vincent, 1902; ash turbidites and air fall
(Carey, S. N., *et al.*) 6(5): 271-274
— Fission-track ages of Pearlette family ash beds; comment
(Boellstorff, J.) 2(1): 21
— Mount Baker eruptions
(Easterbrook, D. J.) 3(12): 679-682
— Zircon fission-track ages of Pearlette family ash beds in Meade County, Kansas
(Naeser, C. W., *et al.*) 1(2): 93-95
— Zircon fission-track ages of Pearlette family ash beds in Meade County, Kansas; reprint
(Naeser, C. W., *et al.*) 1(4): 187-189
igneous rocks—syenite family
monzonite: Early alkalic plutonism in the calc-alkalic batholithic belt of California
(Miller, C. F.) 5(11): 685-688
igneous rocks—ultramafic family
chromitite: Origin of chromitite layers in the Muskox Intrusion and other stratiform intrusions; a new interpretation
(Irvine, T. N.) 5(5): 273-277
kimberlite: Eu anomaly in kimberlite
(Re.tan, P. H.) 2(2): 72
— First kimberlite conference, Republic of South Africa
(MacGregor, I. D.) 2(3): 151-152
— Unique spinel-garnet lherzolite inclusion in kimberlite from Australia
(Ferguson, J., *et al.*) 5(5): 278-280
komatiite: Genesis of Archean komatiites from Munro Township, Ontario; trace-element evidence
(Arth, J. G., *et al.*) 5(10): 590-594
— On the significance of komatite
(Brooks, C., *et al.*) 2(2): 107-110
ophiolite: Age and geologic significance of radiolarian cherts in the California Coast Ranges
(Pessagno, E. A., Jr.) 1(4): 153-156
— Ages of zircons from the Bay of Islands ophiolite complex, western Newfoundland
(Mattinson, J. M.) 4(7): 393-394
— Ages of zircons from the Bay of Islands ophiolite complex, western Newfoundland; discussion
(Church, W. R.) 4(10): 623-625
— Amphibolite associated with Newfoundland ophiolite; its classification and tectonic significance
(Malpas, J., *et al.*) 1(1): 45-47
— Do some eastern Appalachian ultramafic rocks represent mantle diapirs produced above a subduction zone?
(Stevens, R. K., *et al.*) 2(4): 175-178
— Early Paleozoic ophiolite complexes of Newfoundland; isotopic ages of zircons
(Mattinson, J. M.) 3(4): 181-183
— Early Paleozoic ophiolite complexes of Newfoundland; isotopic ages of zircons; discussion and reply
(Williams, H., *et al.*) 3(8): 479
— Early Paleozoic ophiolite complexes of Newfoundland; isotopic ages of zircons; discussion and reply
(Church, W. R., *et al.*) 4(1): 7-8
— Emplacement model for some "Tethyan" ophiolites
(Smith, A. G., *et al.*) 4(11): 653-656
— Geochemical regularities and genetic significance of ophiolitic basalts
(Sun, S. S., *et al.*) 6(11): 689-693
— Geophysical evidence for an east-dipping Appalachian subduction zone beneath Newfoundland
(Haworth, R. T., *et al.*) 6(9): 522-526
— Gravity results and emplacement geometry of the Sulawesi ultramafic belt, Indonesia
(Silver, E. A., *et al.*) 6(9): 527-531
— Metamorphic petrology of the Sarmiento ophiolite complex, Chile
(Elthon, D., *et al.*) 6(8): 464-468
— Mineralized fault zone parallel to the Oman ophiolite spreading axis
(Smewing, J. D., *et al.*) 5(9): 534-538
— Ophiolites in the Earth's crust; a symposium, field excursions, and cultural exchange in the USSR
(Coleman, R. G.) 1(2): 51-54
— Petrologic nature of the oceanic Moho
(Clague, D., *et al.*) 5(3): 133-136
— Petrologic nature of the oceanic Moho; discussion and reply
(Luyendyk, B. P., *et al.*) 5(9): 578-579
— Possible "Caledonian" subduction under the Domnonean domain, North Armorican area
(Kuijper, R. P., *et al.*) 6(11): 644-646
peridotite: Experimental demonstration of the existence of peridotitic liquids in earliest Archean magmatism
(Green, D. H., *et al.*) 3(1): 11-14
— Genesis of Archean peridotitic magmas and constraints on Archean geothermal gradients and tectonics
(Green, D. H.) 3(1): 15-18

igneous rocks—volcanic rocks
age: Episodic volcanism in the central Oregon Cascade Range; confirmation and correlation with the Snake River plain; discussion
(Armstrong, R. L.) 3(7): 356-357
alkalic composition: Petrology and chemistry of Guadalupe Island; an alkalic seamount on a fossil ridge crest
(Batiza, R.) 5(12): 760-764
distribution: Episodic volcanism in the central Oregon Cascade Range
(McBirney, A. R., *et al.*) 2(12): 585-589
— Tidal effects on the formation of pillow lava/hyaloclastite deltas
(Furnes, H., *et al.*) 2(8): 381-384
genesis: Potash-depth (K-h) relations in continental margin and intraoceanic magmatic arcs
(Dickinson, W. R.) 3(2): 53-56
geochemistry: From island arc to oceanic islands; Fiji, southwestern Pacific
(Gill, J. B.) 4(2): 123-126
— Geochemistry of late Cenozoic lavas from eastern Indonesia; role of subducted sediments in petrogenesis
(Whitford, D. J., *et al.*) 5(9): 571-575
— Indonesian active volcanic arc; K, Sr, and Rb variation with depth to the Benioff zone
(Hutchison, C. S.) 4(7): 407-408
— Relationship between depth to Benioff zone and K and Sr concentrations in volcanic rocks of Chile
(Palacios M., C., *et al.*) 3(10): 595-596
— Sr-isotopic evidence for an old mantle source region for French Polynesian volcanism
(Duncan, R. A., *et al.*) 4(12): 728-732
— $^{87}Sr/^{86}Sr$ ratios in some volcanic rocks and some semifused inclusions of the San Francisco volcanic field
(Pushkar, P., *et al.*) 3(11): 669-671
ignimbrite *see* ignimbrite *under* pyroclastics and glasses *under* igneous rocks
Illinois—paleontology
conodonts: Pennsylvanian conodonts of northwestern Illinois; summary and new systematics
(Merrill, G. K.) 3(12): 721-722
Illinois—seismology
earthquakes: Earthquakes and block tectonics in the Illinois Basin
(McGinnis, L. D., *et al.*) 2(10): 517-519
Illinois—stratigraphy
Mississippian: Progress toward reconciliation of Lower Mississippian conodont and foraminiferal zonations
(Brenckle, P., *et al.*) 2(9): 433-436
Pleistocene: Distant source of 1976 dustfall in Illinois and Pleistocene weather models
(Van Heuklon, T. K.) 5(11): 693-695
impact features *see* impact features *under* geomorphology
impact statements *see* impact statements *under* environmental geology *under* United States
incertae sedis *see* problematic fossils
inclusions—xenoliths
host materials: Earliest Precambrian ultramafic-mafic volcanic rocks; ancient oceanic crust of relic terrestrial maria?
(Glikson, A. Y.) 4(4): 201-205
— High-viscosity "conglomerate" channel deposits in Tertiary lamprophyre sill, Sacramento Mountains, New Mexico
(Asquith, G. B.) 1(4): 149-151
— $^{87}Sr/^{86}Sr$ ratios in some volcanic rocks and some semifused inclusions of the San Francisco volcanic field
(Pushkar, P., *et al.*) 3(11): 669-671
lherzolite: Sheared lherzolites; from the point of view of rock mechanics
(Goetze, C.) 3(4): 172-173
— Unique spinel-garnet lherzolite inclusion in kimberlite from Australia
(Ferguson, J., *et al.*) 5(5): 278-280
— Upper-mantle diapirism; evidence from analogous features in alpine peridotite and ultramafic inclusions in basalt
(Wilshire, H. G., *et al.*) 3(8): 467-470
peridotite: Kaersutites, suboceanic low-velocity zone, and the origin of mid-oceanic ridge basalts
(Basu, A. R., *et al.*) 5(6): 365-368
India—seismology
earthquakes: Precursory variation of seismicity rate in the Assam area, India
(Khattri, K., *et al.*) 6(11): 685-688
Indian Ocean *see also* Persian Gulf
Indian Ocean—geophysical surveys
magnetic surveys: Early Cretaceous breakup of Gondwanaland off Western Australia
(Larson, R. L.) 5(1): 57-60
Indian Ocean—stratigraphy
Jurassic: Late Jurassic sea-floor spreading in the eastern Indian Ocean
(Larson, R. L.) 3(2): 69-71
Indian Ocean—tectonophysics
plate tectonics: Subduction and oil migration
(Dickinson, W. R.) 2(9): 421-424
sea-floor spreading: Late Jurassic sea-floor spreading in the eastern Indian Ocean
(Larson, R. L.) 3(2): 69-71
Indiana—geomorphology
solution features: Stratigraphy and origin of surficial deposits in sinkholes in South-central Indiana
(Hall, R. D.) 4(8): 507-509
Indonesia—geophysical surveys
gravity surveys: Gravity results and emplacement geometry of the Sulawesi ultramafic belt, Indonesia
(Silver, E. A., *et al.*) 6(9): 527-531
Indonesia—structural geology
tectonics: Preliminary gravity map of Seram, eastern Indonesia
(Milsom, J.) 5(10): 641-643
Indonesia—tectonophysics
plate tectonics: Geochemistry of late Cenozoic lavas from eastern Indonesia; role of subducted sediments in petrogenesis
(Whitford, D. J., *et al.*) 5(9): 571-575
— Indonesian active volcanic arc; K, Sr, and Rb variation with depth to the Benioff zone
(Hutchison, C. S.) 4(7): 407-408
— Philippine arc system; collision or flipped subduction zones?
(Silver, E. A., *et al.*) 6(4): 199
intrusions—age
fission-track dating: A fission-track age for the Skaergaard Intrusion and the age of the East Greenland basalts
(Brooks, C. K., *et al.*) 5(9): 539-540
intrusions—batholiths
emplacement: Boulder Batholith; a result of emplacement of a block detached from the Idaho batholith infrastructure?
(Hyndman, D. W., *et al.*) 3(7): 401-404
field studies: Circum-Pacific Plutonism Project meetings in South America
(Bateman, P. C.) 2(2): 85-86
genesis: Plutonic zones in the Peninsular Ranges of southern California and northern Baja California; discussion and reply
(Baird, A. K., *et al.*) 3(12): 676-677
geochemistry: Chemical trends across Cretaceous batholithic rocks of southern California
(Baird, A. K., *et al.*) 2(10): 493-495
— Fractionation of rare-earth elements in the Tuolumne Intrusive Series, Sierra Nevada Batholith, California
(Frey, F. A., *et al.*) 6(4): 239-242
thickness: Estimating the "thickness" of the Boulder Batholith, Montana, from heat-flow and heat-productivity data
(Tilling, R. I.) 2(9): 457-460
intrusions—diatremes
kimberlite: Diamond in kimberlitic diatremes of northern Colorado
(McCallum, M. E., *et al.*) 4(8): 467-469
intrusions—extent
indicators: Subsurface extensions of the Santa Rita-Hanover Axis; a major early Tertiary structure, New Mexico
(Aldrich, M. J., Jr.) 6(6): 373-376

intrusions—layered intrusions
petrology: Origin of chromitite layers in the Muskox Intrusion and other stratiform intrusions; a new interpretation
(Irvine, T. N.) 5(5): 273-277

intrusions—mechanism
emplacement: The Cooma Granodiorite, Australia; an example of in situ crustal anatexis?
(Flood, R. H., *et al.*) 6(2): 81-84

intrusions—occurrence
magnetic surveys: Aeromagnetic discovery of a Baltimore gneiss dome in the piedmont of northwestern Delaware and southeastern Pennsylvania
(Higgins, M. W., *et al.*) 1(1): 41-43

intrusions—petrology
nomenclature: Mill Creek Dome revisited
(Higgins, M. W., *et al.*) 2(1): 28

intrusions—plutons
age: A Paleozoic age for some charnockitic-anorthositic rocks
(Foland, K. A., *et al.*) 6(3): 143-146
alkalic composition: Early alkalic plutonism in the calc-alkalic batholithic belt of California
(Miller, C. F.) 5(11): 685-688
genesis: Plutonic zones in the Peninsular Ranges of southern California and northern Baja California
(Gastil, R. G.) 3(7): 361-363
— Plutonic zones in the Peninsular Ranges of southern California and northern Baja California; discussion and reply
(Brown, B. W., *et al.*) 4(1): 9

intrusions—sheets
genesis: Granitoid sheets, thrusting, and Archean crustal thickening in West Greenland
(Myers, J. S.) 4(5): 265-268

intrusions—sills
age: The Palisades Sill; a Jurassic intrusion? Evidence from $^{40}Ar/^{39}Ar$ incremental release ages
(Dallmeyer, R. D.) 3(5): 243-245
xenoliths: High-viscosity "conglomerate" channel deposits in Tertiary lamprophyre sill, Sacramento Mountains, New Mexico
(Asquith, G. B.) 1(4): 149-151

Invertebrata *see also* Annelida; Archaeocyatha; Brachiopoda; Coelenterata; foraminifera; Graptolithina; Ichnofossils; Mollusca; problematic fossils; Radiolaria; Trilobita; worms

Invertebrata—evolution
phylogeny: Primitive fossil flatworm from Alaska; new evidence bearing on ancestry of the Metazoa
(Allison, C. W.) 3(11): 649-652

Invertebrata—paleoecology
benthonic taxa: Extinction of perched faunas
(Johnson, J. G.) 2(10): 479
— Extinction of perched faunas; discussion and reply
(Pitrat, C. W., *et al.*) 3(5): 228-230
communities: Why 'communities'; comment
(Phillips, J.) 2(1): 28
— Why "communities"?; with discussion
(Watkins, R., *et al.*) 1(2): 55-60
extinction: Catastrophe theory; application to the Permian mass extinction
(Lantzy, R. J., *et al.*) 5(12): 724-728
— Catastrophe theory; application to the Permian mass extinction
(Borchardt, G., *et al.*) 6(8): 453-454
— Catastrophe theory; application to the Permian mass extinction
(Boucot, A. J., *et al.*) 6(11): 646-647

Iowa—stratigraphy
Mississippian: Progress toward reconciliation of Lower Mississippian conodont and foraminiferal zonations
(Brenckle, P., *et al.*) 2(9): 433-436

Iran—tectonophysics
plate tectonics: Makran of Iran and Pakistan as an active arc system
(Farhoudi, G., *et al.*) 5(11): 664-668

Ireland—geochronology
Proterozoic: Evidence for basement of late Precambrian age in the Caledonides of western Ireland
(van Breemen, O., *et al.*) 4(8): 499-501

Ireland—structural geology
faults: Continuation of the highland boundary fault in Ireland
(Max, M. D., *et al.*) 3(4): 206-210

isostasy *see* isostasy *under* structural geology *under* Arizona; Atlantic Coastal Plain; Canada; Scandinavia; *see also under* tectonophysics *under* Canada; Greenland; Hawaii; Pacific Coast

isotope dating *see* absolute age

isotopes *see also* absolute age; geochronology

isotopes—carbon
C-13/C-12: Metamorphic alteration of carbon isotopic composition in ancient sedimentary organic matter; new evidence from Australia and South Africa
(McKirdy, D. M., *et al.*) 2(12): 591-595

isotopes—oxygen
O-18/O-16: Extension of the radiolarian Stylatractus universus as a biostratigraphic datum to the Atlantic Ocean
(Morley, J. J., *et al.*) 6(5): 309-311
— Global synchroneity of late Quaternary coccolith datum levels; validation by oxygen isotopes
(Thierstein, H. R., *et al.*) 5(7): 400-404
— Globally synchronous extinction of the radiolarian Stylatractus universus
(Hays, J. D., *et al.*) 4(11): 649-652
— The late Pleistocene record of productivity fluctuations in the eastern equatorial Pacific Ocean
(Adelseck, C. G., Jr., *et al.*) 6(7): 388-391

isotopes—ratios
indicators: Carbon and oxygen isotopes as diagenetic and stratigraphic tools; surface and subsurface data, Barbados, West Indies
(Allan, J. R., *et al.*) 5(1): 16-20

isotopes—sedimentary rocks
limestone: Carbon isotopes and limestone cement
(Hudson, J. D.) 3(1): 19-22

isotopes—strontium
Sr-87/Sr-86: Geochemistry of late Cenozoic lavas from eastern Indonesia; role of subducted sediments in petrogenesis
(Whitford, D. J., *et al.*) 5(9): 571-575
— Kaersutites, suboceanic low-velocity zone, and the origin of mid-oceanic ridge basalts
(Basu, A. R., *et al.*) 5(6): 365-368
— Rb-Sr systematics in granite from central Nepal (Manaslu); significance of the Oligocene age and high $^{87}Sr/^{86}Sr$ ratio in Himalayan Orogeny
(Hamet, J., *et al.*) 4(8): 470-472
— Sr-isotopic evidence for an old mantle source region for French Polynesian volcanism
(Duncan, R. A., *et al.*) 4(12): 728-732
— Strontium-isotope stratigraphy of a Red Sea core
(Boger, P. D., *et al.*) 2(4): 181-183
— Strontium isotopic evidence relating to the evolution of the lower Precambrian granitic crust in Swaziland
(Davies, R. D., *et al.*) 4(9): 553-556
— $^{87}Sr/^{86}Sr$ ratios in some volcanic rocks and some semifused inclusions of the San Francisco volcanic field
(Pushkar, P., *et al.*) 3(11): 669-671

Israel—seismology
earthquakes: Microearthquakes along the Dead Sea Rift
(Wu, F. T., *et al.*) 1(4): 159-161

Italy—petrology
metamorphic rocks: Possible pedogenic origin of Ligurian ophicalcite; a Mesozoic calichified serpentinite
(Folk, R. L., *et al.*) 4(6): 327-332

Italy—stratigraphy
Cretaceous: An estimate of the duration of the faunal change at the Cretaceous-Tertiary boundary
(Kent, D. V.) 5(12): 769-771
Paleocene: An estimate of the duration of the faunal change at the Cretaceous-Tertiary boundary
(Kent, D. V.) 5(12): 769-771

Italy—structural geology
deformation: Formation of spaced cleavage and folds in brittle limestone by dissolution
(Alvarez, W., *et al.*) 4(11): 698-701
folds: Fold distortion; a new indicator of tectonic transport direction
(Alvarez, W.) 6(11): 657-660

Italy—volcanology
Mount Etna: Classification and formation of lava levees on Mount Etna, Sicily
(Sparks, R. S. J., *et al.*) 4(5): 269-271
— Effusion rate and the shape of aa lava flow-fields on Mount Etna
(Wadge, G.) 6(8): 503-506

Japan—economic geology
natural gas: Hydrocarbon potential of marginal basins bounded by an island arc
(Schlanger, S. O., *et al.*) 3(7): 397-400
petroleum: Hydrocarbon potential of marginal basins bounded by an island arc
(Schlanger, S. O., *et al.*) 3(7): 397-400

Japan—seismology
earthquakes: Intrusive origin of the Matsushiro earthquake swarm
(Stuart, W. D., *et al.*) 3(2): 63-67
— Matsushiro, Japan, earthquake swarm; confirmation of the dilatancy-fluid diffusion model
(Nur, A.) 2(5): 217-221
— Post-earthquake dilatancy recovery
(Scholz, C. H.) 2(11): 551-554
— Processes during the Matsushiro, Japan, earthquake swarm as revealed by leveling, gravity, and spring-flow observations
(Kisslinger, C.) 3(2): 57-62

Japan Sea—stratigraphy
Miocene: Implications of late Neogene fresh-water sediment in the Sea of Japan
(Burckle, L. H., *et al.*) 6(2): 123-127

Japan Sea—tectonophysics
heat flow: Hydrocarbon potential of marginal basins bounded by an island arc
(Schlanger, S. O., *et al.*) 3(7): 397-400

joints *see under* style *under* fractures

Jordan—seismology
earthquakes: Microearthquakes along the Dead Sea Rift
(Wu, F. T., *et al.*) 1(4): 159-161

Jurassic *see also under* geochronology *under* Alaska; New Jersey; *see* Jurassic *under* stratigraphy *under* California; Indian Ocean; Mediterranean region

Kansas—geochronology
Quaternary: Zircon fission-track ages of Pearlette family ash beds in Meade County, Kansas
(Naeser, C. W., *et al.*) 1(2): 93-95
— Zircon fission-track ages of Pearlette family ash beds in Meade County, Kansas; reprint
(Naeser, C. W., *et al.*) 1(4): 187-189

karst *see under* solution features *under* geomorphology

Kenya—tectonophysics
plate tectonics: Paleorifting between the Gregory and Ethiopian rifts
(Cerling, T. E., *et al.*) 5(7): 441-444

lakes *see under* environment *under* sedimentation

land use *see also under* environmental geology *under* California; Gulf Coastal Plain; Maryland; Southwestern U.S.

land use—urban planning
nomenclature: Geologic needs and knowledge of real estate brokers and builders
(Mathewson, C. C., *et al.*) 2(11): 539-542

landform description *see* landform description *under* geomorphology

landslides *see* landslides *under* slope stability; *see* landslides *under* mass movements *under* geomorphology

lava *see also* igneous rocks; magmas

lava—flow mechanism
lava levees: Classification and formation of lava levees on Mount Etna, Sicily
(Sparks, R. S. J., *et al.*) 4(5): 269-271
models: Effusion rate and the shape of aa lava flow-fields on Mount Etna
(Wadge, G.) 6(8): 503-506
pumice: The ignimbrite problem; significance of a co-ignimbrite lag-fall deposit
(Lock, B. E., *et al.*) 6(5): 260
pumice flows: The ignimbrite source problem; significance of a co-ignimbrite lag-fall deposit
(Wright, J. V., *et al.*) 5(12): 729-732

lava—genesis
deep-water environment: Variolitic structure in Ordovician pillow lava and its possible significance as an environmental indicator
(Furnes, H.) 1(1): 27-30

lava—geochemistry
differentiation: Petrology and chemistry of Guadalupe Island; an alkalic seamount on a fossil ridge crest
(Batiza, R.) 5(12): 760-764
— Strontium, rubidium, potassium, and calcium variations in Quaternary lavas, Crater Lake, Oregon, and their residual glasses
(Noble, D. C., *et al.*) 2(4): 187-190
isotopes: Sr-isotopic evidence for an old mantle source region for French Polynesian volcanism
(Duncan, R. A., *et al.*) 4(12): 728-732
komatiite: Genesis of Archean komatiites from Munro Township, Ontario; trace-element evidence
(Arth, J. G., *et al.*) 5(10): 590-594
magmas: Magma contamination within the volcanic pile; origin of andesite and dacite
(Eichelberger, J. C.) 2(1): 29-33
trace elements: Lavas from Niuafo'ou Island, Tonga, resemble ocean-floor basalts
(Reay, A., *et al.*) 2(12): 605-606

lava—observations
pahoehoe: Abyssal pahoehoe with lava coils at the Galapagos Rift
(Lonsdale, P.) 5(3): 147-152

lava—occurrence
flysch: Sheeted dikes, gabbro, and pillow basalt in flysch of coastal southern Alaska
(Tysdal, R. G., *et al.*) 5(6): 377-383

lava—properties
magnetic properties: Geomagnetic polarity event recorded at 1.1 m.y. on Cobb Mountain, Clear Lake volcanic field, California
(Mankinen, E. A., *et al.*) 6(11): 653-656

lava—structure
pillow structure: Tidal effects on the formation of pillow lava/hyaloclastite deltas
(Furnes, H., *et al.*) 2(8): 381-384

Lesotho—structural geology
deformation: Sheared lherzolites; from the point of view of rock mechanics
(Goetze, C.) 3(4): 172-173

lexicons—general
thesaurus: Concepts relations in a multilingual thesaurus
(Lloyd, J. J.) 1(4): 152

limestone *see* limestone *under* carbonate rocks *under* sedimentary rocks

lineation *see also* foliation; structural analysis

Louisiana—geomorphology
processes: Lateral erosion and overbank deposition on the Mississippi River in Louisiana caused by 1973 flooding
(Kesel, R. H., *et al.*) 2(9): 461-464
Louisiana—geophysical surveys
remote sensing: Satellite observation of the subaerial growth of the Atchafalaya Delta, Louisiana
(Rouse, L. J., Jr., *et al.*) 6(7): 405-408
lunar studies *see* Moon
Madagascar *see* Malagasy Republic
magmas *see also* igneous rocks; intrusions; lava
magmas—composition
alkalic composition: Early alkalic plutonism in the calc-alkalic batholithic belt of California
(Miller, C. F.) 5(11): 685-688
magmas—differentiation
fractional crystallization: Generation of trondhjemitic-tonalitic liquids and Archean bimodal trondhjemite-basalt suites
(Barker, F., *et al.*) 4(10): 596-600
lava: Petrology and chemistry of Guadalupe Island; an alkalic seamount on a fossil ridge crest
(Batiza, R.) 5(12): 760-764
— Strontium, rubidium, potassium, and calcium variations in Quaternary lavas, Crater Lake, Oregon, and their residual glasses
(Noble, D. C., *et al.*) 2(4): 187-190
mixing: Origin of chromitite layers in the Muskox Intrusion and other stratiform intrusions; a new interpretation
(Irvine, T. N.) 5(5): 273-277
subduction zones: Melting products of olivine tholeiite basalt in subduction zones
(Stern, C. R.) 2(5): 227-230
magmas—genesis
geochemistry: Genesis of Archean komatiites from Munro Township, Ontario; trace-element evidence
(Arth, J. G., *et al.*) 5(10): 590-594
magma chambers: The Cooma Granodiorite, Australia; an example of in situ crustal anatexis?
(Flood, R. H., *et al.*) 6(2): 81-84
mixing: Deep-sea evidence for distribution of tephra from the mixed magma eruption of the Soufriere on St. Vincent, 1902; ash turbidites and air fall
(Carey, S. N., *et al.*) 6(5): 271-274
ultramafic composition: Experimental demonstration of the existence of peridotitic liquids in earliest Archean magmatism
(Green, D. H., *et al.*) 3(1): 11-14
— Genesis of Archean peridotitic magmas and constraints on Archean geothermal gradients and tectonics
(Green, D. H.) 3(1): 15-18
magmas—geochemistry
basalt: Geochemical regularities and genetic significance of ophiolitic basalts
(Sun, S. S., *et al.*) 6(11): 689-693
calc-alkalic composition: Migration of hydrous fluids in the upper mantle and potassium variation in calc-alkalic rocks
(Best, M. G.) 3(8): 429-432
contamination: Geochemistry of late Cenozoic lavas from eastern Indonesia; role of subducted sediments in petrogenesis
(Whitford, D. J., *et al.*) 5(9): 571-575
— Magma contamination within the volcanic pile; origin of andesite and dacite
(Eichelberger, J. C.) 2(1): 29-33
— Magma contamination within the volcanic pile: origin of andesite and decite; discussion and reply
(Millhollen, G. L., *et al.*) 3(4): 164-168
island arcs: From island arc to oceanic islands; Fiji, southwestern Pacific
(Gill, J. B.) 4(2): 123-126
— Potash-depth (K-h) relations in continental margin and intra-oceanic magmatic arcs
(Dickinson, W. R.) 3(2): 53-56
major elements: Scavenging of volcanic aerosol by ash; atmospheric and volcanologic implications
(Rose, W. I., Jr.) 5(10): 621-624
partial melting: Chemical and isotopic constraints on the origin of low-silica latite and andesite from the Andes of central Peru
(Noble, D. C., *et al.*) 3(9): 501-504
rare earths: Fractionation of rare-earth elements in the Tuolumne Intrusive Series, Sierra Nevada Batholith, California
(Frey, F. A., *et al.*) 6(4): 239-242
— Rare-earth partitioning between hornblende and dacitic liquid and implications for the genesis of trondhjemitic-tonalitic magmas
(Arth, J. G., *et al.*) 4(9): 534-536
solubility: High CO_2 solubilities in mantle magmas
(Wyllie, P. J., *et al.*) 4(1): 21-24
— High CO_2 solubilities in mantle magmas; discussion and reply
(Eggler, D. H., *et al.*) 4(4): 198-200
volcanic rocks: Evolution of the mantle; geochemical evidence from alkali basalt; discussion and reply
(Gill, J. B., *et al.*) 4(10): 625-631
magmas—properties
density: Isostatic models of the February 1969 east rift eruption of Kilauea
(Goles, G. G.) 4(12): 783-786
magnesium—abundance
foraminifera: Diagenesis of magnesian calcite; evidence from miliolacean foraminifera
(Towe, K. M., *et al.*) 1(6): 337-339
magnesium—geochemistry
ocean floors: Magnesium metasomatism during hydrothermal alteration of new oceanic crust
(Bloch, S., *et al.*) 6(5): 275-277
magnetic surveys *see* magnetic surveys *under* geophysical surveys *under* Appalachians; Atlantic Coastal Plain; Basin and Range Province; Colorado Plateau; Indian Ocean; Wyoming
Maine—petrology
metamorphic rocks: Coexisting cordierite + biotite + chlorite from the Rumford Quadrangle, Maine
(Guidotti, C. V., *et al.*) 3(3): 147-148
Malagasy Republic—stratigraphy
continental drift: Paleomagnetic evidence for the location of Madagascar in Gondwanaland
(McElhinny, M. W., *et al.*) 4(8): 455-457
Malay Archipelago *see also* New Guinea
Malay Archipelago—tectonophysics
plate tectonics: Gravity results and emplacement geometry of the Sulawesi ultramafic belt, Indonesia
(Silver, E. A., *et al.*) 6(9): 527-531
Mammalia—biostratigraphy
correlation: Biostratigraphy and magnetostratigraphy of Paleocene terrestrial deposits, San Juan Basin, New Mexico
(Lindsay, E. H., *et al.*) 6(7): 425-429
Mammalia—paleoecology
extinction: Pleistocene plagues?
(Spirakis, C. S.) 3(7): 372
Mammalia—Perissodactyla
Cenozoic: Horse genealogy; the Oregon connection
(Drake, E. T.) 6(10): 587-591
Mammalia—Proboscidea
Pleistocene: Interstadial mammoth remains and associated pollen and insect fossils, Kotzebue Sound area, northwestern Alaska
(Hopkins, D. M., *et al.*) 4(3): 169-172
manganese—abundance
mid-ocean ridges: Estimation of hydrothermal manganese input to the oceans
(Lyle, M.) 4(12): 733-736
mantle *see* mantle *under* tectonophysics *under* North America; Northwest Territories; Polynesia; Precambrian

mantle—composition
carbon dioxide: High CO_2 solubilities in mantle magmas
(Wyllie, P. J., *et al.*) 4(1): 21-24
— High CO_2 solubilities in mantle magmas; discussion and reply
(Eggler, D. H., *et al.*) 4(4): 198-200
experimental studies: Stability of dolomite in a hydrous mantle, with implications for the mantle solidus
(Eggler, D. H.) 6(7): 397-400
theoretical studies: Uniformity of mantle composition
(Watt, J. P., *et al.*) 3(2): 91-94
upper mantle: Migration of hydrous fluids in the upper mantle and potassium variation in calc-alkalic rocks
(Best, M. G.) 3(8): 429-432

mantle—evolution
geochemistry: Evolution of the mantle; geochemical evidence from alkali basalt
(Sun, S. S., *et al.*) 3(6): 297-302
— Evolution of the mantle; geochemical evidence from alkali basalt; discussion and reply
(Gill, J. B., *et al.*) 4(10): 625-631

mantle—geochemistry
phase equilibria: Peridotite, kimberlite, and carbonatite explained in the system $CaO-MgO-SiO_2-CO_2$
(Wyllie, P. J., *et al.*) 3(11): 621-624

mantle—processes
diapirism: Upper-mantle diapirism; evidence from analogous features in alpine peridotite and ultramafic inclusions in basalt
(Wilshire, H. G., *et al.*) 3(8): 467-470
partial melting: Does CO_2 cause partial melting in the low-velocity layer of the mantle?
(Eggler, D. H.) 4(2): 69-72
— Does CO_2 cause partial melting in the low-velocity layer of the mantle?; discussion and reply
(Wyllie, P. J., *et al.*) 4(12): 712, 787-789
— Eu anomaly in kimberlite
(Reitan, P. H.) 2(2): 72

maps *see also under* environmental geology *under* automatic data processing; Virginia; *see also under* structural geology *under* California

maps—cartography
isopleth maps: Preparation and use of isopleth maps of landslide deposits
(Wright, R. H., *et al.*) 2(10): 483-485
— Preparation and use of isopleth maps of landslide deposits; discussion and reply
(Vitek, J. D., *et al.*) 3(4): 217-218
programs: Preliminary interpretation of aeromagnetic and aeroradioactivity maps of the Alabama Piedmont
(Neathery, T. L., *et al.*) 4(6): 375-381

marine geology *see also* oceanography; *see* marine geology *under* oceanography *under* Okhotsk Sea

marine geology—methods
sampling: Selection of sample intervals in deep-sea sedimentary cores
(Ledbetter, M. T., *et al.*) 4(5): 303-304

Maritime Provinces—stratigraphy
biogeography: Correlation of the Cambrian-Ordovician boundary between the Acado-Baltic and North American faunal provinces
(Landing, E., *et al.*) 6(2): 75-78

Mars—concepts
cyclic processes: Geologic cycle of Mars; a comparison with the Earth and Moon
(Wilson, R. C., *et al.*) 2(3): 121-124

Mars—geochemistry
regolith: Martian regolith X-ray analyzer; comment
(Heydegger, H. R.) 2(1): 22
— Martian regolith X-ray analyzer; reply
(Clark, B. C., *et al.*) 2(1): 23-24
— Martian regolith X-ray analyzer; test results of geochemical performance
(Clark, B. C., *et al.*) 1(1): 15-18

Mars—geomorphology
channels: Meteorite impact; a suggestion for the origin of some stream channels on Mars
(Maxwell, T. A., *et al.*) 1(1): 9-10
volcanic features: Mariner 9 photographs of small volcanic structures on Mars
(Greeley, R.) 1(4): 175-180

Maryland—engineering geology
shorelines: Impact of Hurricane Belle on Assateague Island washover
(Fisher, J. S., *et al.*) 5(12): 765-768

Maryland—environmental geology
land use: Channel changes
(Emmett, W. W.) 2(6): 271-272

Maryland—structural geology
tectonics: Gravity anomalies associated with the Salisbury Embayment, Maryland-southern Delaware
(Sabet, M. A.) 5(7): 433-436

mass movements *see* mass movements *under* geomorphology

Massachusetts—sedimentary petrology
sediments: Comparison between sieving and settling-tube determinations of sand sizes by using discriminant analysis
(Jones, J. R., *et al.*) 4(12): 741-744

Massachusetts—stratigraphy
Paleozoic: Quartz sand surface textural evidence for a glacial origin of the Squantum "tillite," Boston Basin, Massachusetts
(Rehmer, J. A., *et al.*) 2(8): 413-415
— Quartz sand surface textural evidence for a glacial origin of the Squantum "Tillite," Boston Basin, Massachusetts; discussions and reply
(Stuart, C. J., *et al.*) 3(3): 153-155

mathematical geology *see also* automatic data processing

mathematical geology—concepts
catastrophism: Catastrophe theory; application to the Permian mass extinction
(Lantzy, R. J., *et al.*) 5(12): 724-728

mathematical geology—methods
trigonometry: Rotations by spherical trigonometry
(Beck, M. E., Jr.) 4(4): 215-216

Mediterranean region—geophysical surveys
acoustical surveys: Local submarine salt-karst formation on the Hellenic outer ridge, eastern Mediterranean
(Belderson, R. H., *et al.*) 6(12): 716-720

Mediterranean region—sedimentary petrology
sedimentary rocks: Pelagic limestone and radiolarite of the Tethyan Mesozoic: a genetic model
(Bosellini, A., *et al.*) 3(5): 279-282

Mediterranean region—stratigraphy
Jurassic: Paleoceanography of the Mesozoic Alpine Tethys; summary
(Hsu, K. J.) 3(6): 347-348

Mediterranean region—structural geology
salt tectonics: Diapiric structures in the eastern Mediterranean Cilicia Basin
(Smith, S. G.) 5(11): 705-707

Mediterranean region—tectonophysics
plate tectonics: Microplate tectonics, oblique collisions, and evolution of the Hercynian orogenic systems
(Badham, J. P. N., *et al.*) 3(7): 373-376
— Tectonic evolution of the Middle East and the Levantine Basin (easternmost Mediterranean)
(Neev, D.) 3(12): 683-686
— Where are the passive margins of the western Tethys Ocean?
(Le Pichon, X., *et al.*) 6(10): 597-600

Mediterranean Sea—geochemistry
bromine: Bromine content of Mediterranean halite
(Kuhn, R., *et al.*) 2(5): 213-216
— Bromine content of Mediterranean halite; discussion and reply
(Kendall, A. C., *et al.*) 2(11): 524-526

Mediterranean Sea—geophysical surveys
seismic surveys: Diapiric structures in the eastern Mediterranean Cilicia Basin
(Smith, S. G.) 5(11): 705-707
— Faulting and halokinetics in the northeastern Mediterranean between Cyprus and Turkey
(Evans, G., *et al.*) 6(7): 392-396

Mediterranean Sea—oceanography
ocean floors: Local submarine salt-karst formation on the Hellenic outer ridge, eastern Mediterranean
(Belderson, R. H., *et al.*) 6(12): 716-720
sediments: Lithofacies as a function of depth in the Strait of Sicily
(Maldonado, A., *et al.*) 5(2): 111-117

Mediterranean Sea—stratigraphy
Miocene: The salt that was
(Schreiber, B. C., *et al.*) 5(9): 527-528

Mediterranean Sea—structural geology
neotectonics: Subsidence of the western Mediterranean Basin in Pliocene-Quaternary time; further evidence
(Stanley, D. J., *et al.*) 2(7): 345-350
salt tectonics: Diapiric structures in the eastern Mediterranean Cilicia Basin
(Goguel, J., *et al.*) 6(8): 452-453
— Faulting and halokinetics in the northeastern Mediterranean between Cyprus and Turkey
(Evans, G., *et al.*) 6(7): 392-396
tectonics: Tectonic evolution of the Middle East and the Levantine Basin (easternmost Mediterranean)
(Neev, D.) 3(12): 683-686

meetings *see* symposia

Melanesia *see also* Fiji

melange *see* melange *under* interpretation *under* structural analysis

Mesozoic *see* Mesozoic *under* stratigraphy *under* California; Connecticut

metals *see also* magnesium; manganese; titanium; *see also under* economic geology *under* Nevada

metals—exploration
electrical methods: Self-potential prospecting in the deep oceans
(Brewitt-Taylor, C. R.) 3(9): 541-542

metals—genesis
classification: Note on boiling of ascending ore fluids and the position of volcanic-exhalative deposits in the modified Lindgren classification
(Ridge, J. D.) 2(6): 287-288

metamorphic rocks *see also* igneous rocks; metamorphism; metasomatism

metamorphic rocks—amphibolites
age: Early Cretaceous basement rocks in Hispaniola
(Kesler, S. E., *et al.*) 5(4): 245-247
genesis: Amphibolite associated with Newfoundland ophiolite; its classification and tectonic significance
(Malpas, J., *et al.*) 1(1): 45-47

metamorphic rocks—composition
mafic composition: Possible "Caledonian" subduction under the Domnonean domain, North Armorican area
(Kuijper, R. P., *et al.*) 6(11): 644-646

metamorphic rocks—genesis
interpretation: Earliest Precambrian ultramafic-mafic volcanic rocks; ancient oceanic crust of relic terrestrial maria?
(Glikson, A. Y.) 4(4): 201-205
— Earliest Precambrian ultramafic-mafic volcanic rocks; ancient oceanic crust or relic terrestrial maria?; discussion (The chicken or the egg) and reply (Vestiges of a beginning)
(Bickle, M. J., *et al.*) 5(2): 68-71
ophiolite: Origins of some ophiolite-related metamorphic rocks of the "Tethyan" belt
(Woodcock, N. H., *et al.*) 5(6): 373-376

metamorphic rocks—geochemistry
trace elements: Petrology and geochemistry of mafic rocks from the Cayman Trench; evidence for spreading
(Perfit, M. R.) 5(2): 105-110

metamorphic rocks—gneisses
age: Evidence for basement of late Precambrian age in the Caledonides of western Ireland
(van Breemen, O., *et al.*) 4(8): 499-501
— Strontium isotopic evidence relating to the evolution of the lower Precambrian granitic crust in Swaziland
(Davies, R. D., *et al.*) 4(9): 553-556
genesis: Generation of trondhjemitic-tonalitic liquids and Archean bimodal trondhjemite-basalt suites
(Barker, F., *et al.*) 4(10): 596-600
occurrence: Aeromagnetic discovery of a Baltimore gneiss dome in the piedmont of northwestern Delaware and southeastern Pennsylvania
(Higgins, M. W., *et al.*) 1(1): 41-43
— Mill Creek Dome revisited
(Higgins, M. W., *et al.*) 2(1): 28

metamorphic rocks—granulites
distribution: Paired metamorphic belts in Precambrian granulite rocks in Gondwanaland
(Katz, M. B.) 2(5): 237-241

metamorphic rocks—marbles
ophicalcite: Possible pedogenic origin of Ligurian ophicalcite; a Mesozoic calichified serpentinite
(Folk, R. L., *et al.*) 4(6): 327-332

metamorphic rocks—metaigneous rocks
metaperidotite: On elongate olivine of metamorphic orgin
(Evans, B. W., *et al.*) 2(3): 131-132

metamorphic rocks—metaplutonic rocks
age: A Paleozoic age for some charnockitic-anorthositic rocks
(Foland, K. A., *et al.*) 6(3): 143-146

metamorphic rocks—metasedimentary rocks
provenance: Framework mineralogy and chemical composition of continental margin-type sandstone
(Schwab, F. L.) 3(9): 487-490

metamorphic rocks—metavolcanic rocks
genesis: Tectonic implications of a late Paleozoic volcanic arc in the Talkeetna Mountains, south-central Alaska
(Csejtey, B., Jr.) 4(1): 49-52

metamorphic rocks—mineral assemblages
phase equilibria: Significance of coexisting lawsonite, prehnite, and aragonite in the San Juan Islands, Washington
(Glassley, W. E., *et al.*) 4(5): 301-302
zoning: Coexisting cordierite + biotite + chlorite from the Rumford Quadrangle, Maine
(Guidotti, C. V., *et al.*) 3(3): 147-148

metamorphic rocks—mylonites
genesis: Eastern Piedmont fault system; speculations on its extent
(Chapman, J. J.) 6(10): 580-582
pseudotechylite: Are pseudotachylites products of fracture or fusion?
(Wenk, H. R.) 6(8): 507-511

metamorphic rocks—properties
optical properties: Effects of metamorphism on quartz cathodoluminescence
(Sprunt, E. S., *et al.*) 6(5): 305-308

metamorphic rocks—schists
blueschist: Blueschists of the Kodiak Islands, Alaska; an extension of the Seldovia schist terrane
(Carden, J. R., *et al.*) 5(9): 529-533
— Triassic blueschist from northern California and North-central Oregon
(Hotz, P. E., *et al.*) 5(11): 659-663
contact: South Fork Mountain Schist at Black Butte and Cottonwood Creek, northern California
(Bishop, D. G.) 5(10): 595-599

metamorphic rocks—slates
textures: Rotation and dewatering during slaty cleavage formation; some new evidence and interpretations
(Alterman, I. B.) 1(1): 33-36

metamorphic rocks—textures
fabric: Tectonite and melange; a distinction
(Raymond, L. A.) 3(1): 7-9
— Tectonite and melange; a distinction; discussion and reply
(Beutner, E. C., *et al.*) 3(7): 358-359

metamorphism—age
absolute age: K-Ar ages from the Near Islands, western Aleutian Islands, Alaska; indication of a mid-Oligocene thermal event
(DeLong, S. E., *et al.*) 3(12): 691-694
— Triassic blueschist from northern California and North-central Oregon
(Hotz, P. E., *et al.*) 5(11): 659-663

metamorphism—burial metamorphism
age: Radiometric dating of time of thrusting in the disturbed belt of Montana
(Hoffman, J., *et al.*) 4(1): 16-20

metamorphism—concepts
review: Early theories and hypotheses on pressure-solution-redeposition
(Durney, D. W.) 6(6): 369-372

metamorphism—contact metamorphism
effects: On elongate olivine of metamorphic orgin
(Evans, B. W., *et al.*) 2(3): 131-132

metamorphism—extent
metamorphic belts: Paired metamorphic belts in Precambrian granulite rocks in Gondwanaland
(Katz, M. B.) 2(5): 237-241

metamorphism—grade
changes: The Cooma Granodiorite, Australia; an example of in situ crustal anatexis?
(Flood, R. H., *et al.*) 6(2): 81-84
indicators: Effects of metamorphism on quartz cathodoluminescence
(Sprunt, E. S., *et al.*) 6(5): 305-308

metamorphism—mechanism
dewatering: Dewatering of a metamorphic pile
(Norris, R. J., *et al.*) 4(6): 333-336

metamorphism—migration of elements
mass balance: Magnesium metasomatism during hydrothermal alteration of new oceanic crust
(Bloch, S., *et al.*) 6(5): 275-277

metamorphism—P-T conditions
heat sources: Origins of some ophiolite-related metamorphic rocks of the "Tethyan" belt
(Woodcock, N. H., *et al.*) 5(6): 373-376
indicators: Amphibolite associated with Newfoundland ophiolite; its classification and tectonic significance
(Malpas, J., *et al.*) 1(1): 45-47
interpretation: Metamorphic petrology of the Sarmiento ophiolite complex, Chile
(Elthon, D., *et al.*) 6(8): 464-468
isograds: Metamorphic P-T conditions and the geothermal gradients calculated from geophysical data
(Thompson, P. H.) 5(9): 520-522
— Metamorphic P-T distributions and the geothermal gradients calculated from geophysical data
(Ayrton, S., *et al.*) 6(8): 454-455
mineral assemblages: Significance of coexisting lawsonite, prehnite, and aragonite in the San Juan Islands, Washington
(Glassley, W. E., *et al.*) 4(5): 301-302
mylonitization: Eastern Piedmont fault system; speculations on its extent
(Chapman, J. J.) 6(10): 580-582

metamorphism—retrograde metamorphism
concepts: A model for the development of thin overthrust sheets of crystalline rocks
(Armstrong, R. L., *et al.*) 2(1): 35-40

metamorphism—zoning
mineral assemblages: Coexisting cordierite + biotite + chlorite from the Rumford Quadrangle, Maine
(Guidotti, C. V., *et al.*) 3(3): 147-148

metasomatism—materials
evaporites: Evaporites as precursors of massif anorthosite
(Gresens, R. L.) 6(1): 46-50

metasomatism—processes
diffusion: Magnesium metasomatism during hydrothermal alteration of new oceanic crust
(Bloch, S., *et al.*) 6(5): 275-277
hydrothermal alteration: Hydrothermal alteration of basalts from Hawaii Geothermal Project Well-A, Kilauea, Hawaii
(Stone, C., *et al.*) 6(7): 401-404
— Metamorphic petrology of the Sarmiento ophiolite complex, Chile
(Elthon, D., *et al.*) 6(8): 464-468
— Thermal contraction and alteration of the oceanic crust
(Epp, D., *et al.*) 6(12): 726-728

meteor craters *see also under* geomorphology *under* South Africa; USSR

meteorology—water
precipitation: Recent ice age in Florida?; discussion and reply
(Bradley, R. S., *et al.*) 4(4): 197-198

Mexico *see also* Gulf Coastal Plain; Gulf of California

Mexico—geochemistry
plutonic rocks: Plutonic zones in the Peninsular Ranges of southern California and northern Baja California; discussion and reply
(Baird, A. K., *et al.*) 3(12): 676-677

Mexico—geochronology
Pleistocene: Age and magnitude of the late Pleistocene sea-level rise on the eastern Yucatan Peninsula
(Szabo, B. J., *et al.*) 6(12): 713-715

Mexico—geophysical surveys
acoustical surveys: Possible rip current origin for bottom ripple zones to 30-m depth
(Reimnitz, E., *et al.*) 4(7): 395-400

Mexico—petrology
igneous rocks: Petrology and chemistry of Guadalupe Island; an alkalic seamount on a fossil ridge crest
(Batiza, R.) 5(12): 760-764
— The ignimbrite source problem; significance of a co-ignimbrite lag-fall deposit
(Wright, J. V., *et al.*) 5(12): 729-732
intrusions: Plutonic zones in the Peninsular Ranges of southern California and northern Baja California
(Gastil, R. G.) 3(7): 361-363
— Plutonic zones in the Peninsular Ranges of southern California and northern Baja California; discussion and reply
(Brown, B. W., *et al.*) 4(1): 9

Mexico—sedimentary petrology
diagenesis: Influence of climate on the early diagenesis of carbonate eolianites
(Ward, W. C.) 1(4): 171-174
reefs: Thickest recorded Holocene reef section, Isla Perez core hole, Alacran Reef, Mexico
(Macintyre, I. G., *et al.*) 5(12): 749-754

Mexico—stratigraphy
Cretaceous: Late Cretaceous reversal sequence
(Keating, B., *et al.*) 3(2): 73-76

Mexico—tectonophysics
plate tectonics: Offset across the Polochic Fault of Guatemala and Chiapas, Mexico
(Burkart, B.) 6(6): 328-332

micropaleontology—techniques
sample preparation: Effects of ultrasonic pressure on calcareous nannofossils
(Clak, D. F.) 1(2): 61-62

mid-ocean ridges *see under* ocean floors

Middle East *see also* Israel; Jordan

Midwest—geomorphology
fluvial features: Paleogeomorphic and paleoclimatic implications of "preglacial" meanders in the Cincinnati area
(Dury, G. H., *et al.*) 3(10): 585-586

Midwest—stratigraphy
Devonian: Middle Devonian paleogeography of the Wabash Platform, Indiana, Illinois, and Ohio
(Droste, J. B., *et al.*) 3(5): 269-272
— Middle Devonian paleogeography of the Wabash Platform, Indiana, Illinois, and Ohio; discussion
(Sparling, D. R.) 3(12): 677-678
Midwest—tectonophysics
crust: Earthquakes and block tectonics in the Illinois Basin
(McGinnis, L. D., *et al.*) 2(10): 517-519
mineral deposits, genesis—diamonds
provenance: Proposed origin for Guianian diamonds
(Reid, A. R.) 2(2): 67-68
— Proposed origin for Guianian diamonds; discussions and reply
(Leo, G. W., *et al.*) 2(7): 336-338
mineral deposits, genesis—processes
exhalative processes: Manganese deposited by submarine hot springs in chert-greenstone complexes, western United States
(Snyder, W. S.) 6(12): 741-744
— Note on boiling of ascending ore fluids and the position of volcanic-exhalative deposits in the modified Lindgren classification
(Ridge, J. D.) 2(6): 287-288
hydrothermal processes: Duration of hydrothermal activity at an oceanic spreading center, Mid-Atlantic Ridge (lat 26°N)
(Scott, R. B., *et al.*) 4(4): 233-236
— Estimation of hydrothermal manganese input to the oceans
(Lyle, M.) 4(12): 733-736
plate tectonics: Distribution and genesis of fluorite deposits in the western United States and their significance to metallogeny
(Lamarre, A. L., *et al.*) 6(4): 236-238
mineral exploration—geophysical methods
electrical methods: Self-potential prospecting in the deep oceans
(Brewitt-Taylor, C. R.) 3(9): 541-542
mineral exploration—remote sensing
color imagery: Mapping of hydrothermal alteration in the Cuprite mining district, Nevada, using aircraft scanner images for the spectral region 0.46 to 2.36 μm
(Abrams, M. J., *et al.*) 5(12): 713-718
mineral prospecting *see* mineral exploration
mineral resources—genesis
classification: Note on boiling of ascending ore fluids and the position of volcanic-exhalative deposits in the modified Lindgren classification
(Ridge, J. D.) 2(6): 287-288
minerals *see also* crystal growth; crystal structure
minerals—carbonates
aragonite: Radial aragonite ooids, Lizard Island, Greater Barrier Reef, Queensland, Australia
(Davies, P. J., *et al.*) 4(2): 120-122
— Submarine botryoidal aragonite in Holocene reef limestones, Belize
(Ginsburg, R. N., *et al.*) 4(7): 431-436
calcite: Diagenesis of magnesian calcite; evidence from miliolacean foraminifera
(Towe, K. M., *et al.*) 4(6): 337-339
— Displacive calcite; evidence from recent and ancient calcretes
(Watts, N. L.) 6(11): 699-703
— Former magnesian calcite and aragonite submarine cements in upper Paleozoic reefs of the Canadian Arctic; a summary
(Davies, G. R.) 5(1): 11-15
— Length-slow and length-fast calcite; a tale of two elongations
(Dickson, J. A. D.) 6(9): 560-561
— Submarine recrystallization of a coral skeleton in a Holocene Bahamian reef
(Scherer, M.) 2(10): 499-500
dolomite: Construction of limpid dolomite
(Weaver, C. E.) 3(8): 425-428
— Dolomite synthesis and crystal growth
(Deelman, J. C.) 3(8): 471-472
— Stability of dolomite in a hydrous mantle, with implications for the mantle solidus
(Eggler, D. H.) 6(7): 397-400
occurrence: Ground-water formation of dolomite in the Coorong region of South Australia
(Von der Borch, C. C., *et al.*) 3(5): 283-285
minerals—chain silicates
clinopyroxene: Clinopyroxene-bearing glass spherules associated with North American microtektites
(John, C., *et al.*) 2(12): 599-602
hornblende: Hornblende deformation features
(Rooney, T. P., *et al.*) 3(7): 364-366
kaersutite: Kaersutites, suboceanic low-velocity zone, and the origin of mid-oceanic ridge basalts
(Basu, A. R., *et al.*) 5(6): 365-368
minerals—framework silicates, silica minerals
occurrence: Distribution of opal and quartz on the ocean floor of the subtropical southeastern Pacific
(Molina-Cruz, A., *et al.*) 5(2): 81-84
quartz: Effects of metamorphism on quartz cathodoluminescence
(Sprunt, E. S., *et al.*) 6(5): 305-308
— Structure and significance of planar deformation features in synthetic quartz
(Twiss, R. J.) 2(7): 329-332
— Substructures of deformation lamellae in quartz
(Christie, J. M., *et al.*) 2(8): 405-408
minerals—halides
crystal growth: Magnesium hydroxychloride; a possible pH buffer in marine evaporite brines?
(Bodine, M. W., Jr.) 4(2): 76-80
halite: Halite and hydrohalite from Lake Bonney, Taylor Valley, Antarctica
(Craig, J. R., *et al.*) 2(8): 389-390
minerals—native elements and alloys
diamond: Diamond in kimberlitic diatremes of northern Colorado
(McCallum, M. E., *et al.*) 4(8): 467-469
minerals—orthosilicates
olivine: Mechanisms of preferred orientations of olivine in tectonite peridotite
(Ave Lallemant, H. G.) 3(11): 653-656
— Mechanisms of preferred orientations of olivine in tectonite peridotite; discussion and reply
(Shelley, D., *et al.*) 4(9): 518-520
— On elongate olivine of metamorphic orgin
(Evans, B. W., *et al.*) 2(3): 131-132
minerals—oxides
magnetic properties: New combination of techniques for determination of the ultrafine structure of magnetic minerals
(Hoblitt, R. P., *et al.*) 3(12): 723-726
magnetite: Magnetic spherules from the Mid-Atlantic Ridge
(Aumento, F., *et al.*) 3(7): 407-410
minerals—sheet silicates, clay minerals
kaolinite: Kaolinization of feldspar as displayed in scanning electron micrographs
(Keller, W. D.) 6(3): 184-188
minerals—silicates
occurrence: Coexisting cordierite + biotite + chlorite from the Rumford Quadrangle, Maine
(Guidotti, C. V., *et al.*) 3(3): 147-148
— Hydrothermal alteration of basalts from Hawaii Geothermal Project Well-A, Kilauea, Hawaii
(Stone, C., *et al.*) 6(7): 401-404
minerals—sulfates
gypsum: The salt that was
(Schreiber, B. C., *et al.*) 5(9): 527-528
minerals—sulfides
pyrite: Microbiota from the Late Proterozoic Tindir Group, Alaska
(Allison, C. W., *et al.*) 1(2): 65-68
— Pyrite framboid; animal, vegetable, or mineral?; discussion
(Kalliokoski, J.) 2(1): 26-27
— Pyritized microfossils and pyrite framboids; reply
(Allison, C. W., *et al.*) 2(4): 202-203

mining geology—technology
geothermal energy: Status of the Los Alamos experiment to extract geothermal energy from hot dry rock
(Laughlin, A. W., *et al.*) 5(4): 237-240

Minnesota—geophysical surveys
surveys: Crater or kettle? A geophysical study
(Hammer, S., *et al.*) 3(3): 145-146

Miocene *see* Miocene *under* geochronology *under* California; Nevada; *see also under* stratigraphy *under* Japan Sea; Mediterranean Sea

Miocene—stratigraphy
boundary: Status of late Cenozoic boundaries
(Van Couvering, J. A.) 6(3): 169
transgression: Speculations on real sea-level changes and vertical motions of continents at selected times in the Cretaceous and Tertiary periods
(Bond, G.) 6(4): 247-250

Mississippi Valley—engineering geology
geologic hazards: History of reports on selected faults in southern and eastern Wisconsin
(Kuntz, C. S., *et al.*) 4(4): 241-246

Mississippi Valley—environmental geology
geologic hazards: Lateral erosion and overbank deposition on the Mississippi River in Louisiana caused by 1973 flooding
(Kesel, R. H., *et al.*) 2(9): 461-464

Mississippian *see* Mississippian *under* stratigraphy *under* Illinois; Iowa; Rocky Mountains

Missouri—geochronology
Precambrian: Geochronology of Precambrian rocks in the St. Francois Mountains, southeastern Missouri; summary
(Bickford, M. E., *et al.*) 3(9): 537-540

Missouri—sedimentary petrology
weathering: Kaolinization of feldspar as displayed in scanning electron micrographs
(Keller, W. D.) 6(3): 184-188

Mohorovicic discontinuity—interpretation
igneous rocks: Petrologic nature of the oceanic Moho; discussion and reply
(Luyendyk, B. P., *et al.*) 5(9): 578-579
petrology: Petrologic nature of the oceanic Moho
(Clague, D., *et al.*) 5(3): 133-136

Mollusca—Bivalvia
Cretaceous: Epifaunal zonation on an Upper Cretaceous rocky coast
(Surlyk, F., *et al.*) 2(11): 529-534
paleoecology: A reflection on genetic extinction, and the "killer clam"
(Bretsky, P. W.) 1(4): 157
— On scientific hypotheses, killer clams, and extinction; discussion
(Valentine, J. W., *et al.*) 2(2): 69-71
— Why 'communities?; comment
(Boucot, A. J.) 2(4): 204
Pleistocene: Pleistocene stratigraphy in southern Florida based on amino acid diagenesis in fossil Mercenaria
(Mitterer, R. M.) 2(9): 425-428

Mollusca—Cephalopoda
Eocene: Eocene rhyncholite from California
(Teichert, C., *et al.*) 3(4): 178-180

molybdenum *see also under* economic geology *under* Western U.S.

Montana—geochronology
Cretaceous: Radiometric dating of time of thrusting in the disturbed belt of Montana
(Hoffman, J., *et al.*) 4(1): 16-20
Paleocene: Radiometric dating of time of thrusting in the disturbed belt of Montana
(Hoffman, J., *et al.*) 4(1): 16-20

Montana—geophysical surveys
heat flow: Estimating the "thickness" of the Boulder Batholith, Montana, from heat-flow and heat-productivity data
(Tilling, R. I.) 2(9): 457-460
surveys: Audio-frequency magnetotelluric and gravity traverse across the crest of the Purcell Anticlinorium, northwestern Montana
(Wynn, J. C., *et al.*) 5(5): 309-312

Montana—sedimentary petrology
sedimentary structures: Bioturbation and the origin of the metazoans; evidence from the Belt Supergroup, Montana
(Byers, C. W.) 4(9): 565-567

Montana—structural geology
tectonics: Change in tectonic style along the Montana thrust belt
(Bregman, M. L.) 4(12): 775-778

Moon—interior
crust: Plagioclase flotation and lunar crust formation
(Walker, D., *et al.*) 5(7): 425-428
— Plagioclase flotation and lunar crust formation; discussion and reply
(Roeder, P. L., *et al.*) 5(12): 712

Moon—mineralogy
akaganeite: Identification of the hydrated iron oxide mineral akaganeite in Apollo 16 lunar rocks
(Taylor, L. A., *et al.*) 2(9): 429-432
armalcolite: Optical properties and chemical compositions of Apollo 17 armalcolites
(Williams, K. L., *et al.*) 2(1): 5-8

Moon—surface properties
color: Lunar mare color provinces as observed on Apollo 17
(Schmitt, H. H.) 2(2): 55-56

Morocco—sedimentary petrology
sedimentation: Jurassic sedimentation in the High Atlas Mountains of Morocco during early rifting of Africa and North America
(Evans, I., *et al.*) 2(6): 295-296

Morocco—tectonophysics
plate tectonics: A plate tectonics origin for late Precambrian-Paleozoic orogenic belt in Morocco
(Hurley, P. M., *et al.*) 2(7): 343-344

mud volcanoes *see also* volcanology

native elements and alloys *see under* minerals

natural gas *see also under* economic geology *under* Japan

natural resources *see under* conservation

Neogene *see also under* geochronology *under* igneous rocks; Oregon; Pacific Ocean

neotectonics *see also under* structural geology *under* Atlantic Coastal Plain; Atlantic region; California; China; Colorado; Great Basin; Guatemala; Mediterranean Sea; New Mexico; Pacific Coast; Scandinavia; South America; South Carolina; Texas; Utah

Nepal—geochronology
Oligocene: Rb-Sr systematics in granite from central Nepal (Manaslu); significance of the Oligocene age and high $^{87}Sr/^{86}Sr$ ratio in Himalayan Orogeny
(Vidal, P., *et al.*) 6(4): 196-197

Nevada—economic geology
metals: Mapping of hydrothermal alteration in the Cuprite mining district, Nevada, using aircraft scanner images for the spectral region 0.46 to 2.36 μm
(Abrams, M. J., *et al.*) 5(12): 713-718

Nevada—geochronology
Miocene: Eureka Valley Tuff, East-central California and adjacent Nevada
(Noble, D. C., *et al.*) 2(3): 139-142

Nevada—geophysical surveys
remote sensing: Mapping of hydrothermal alteration in the Cuprite mining district, Nevada, using aircraft scanner images for the spectral region 0.46 to 2.36 μm
(Abrams, M. J., *et al.*) 5(12): 713-718
— Near-infrared reflectance anomalies of andesite and basalt in southern California and Nevada
(Pohn, H. A.) 2(11): 547-550

Nevada—petrology
igneous rocks: Ash-flow fissure vent in West-central Nevada
(Ekren, E. B., *et al.*) 4(4): 247-251

Nevada—sedimentary petrology
diagenesis: Diagenetic dolomite formation related to Paleozoic paleogeography of the Cordilleran miogeocline in Nevada
(Dunham, J. B., *et al.*) 6(9): 556-559

sedimentation: Silurian (Llandovery) downdropping of the western margin of North America
(Johnson, J. G., *et al.*) 3(6): 331-334
— Summary of Silurian and Lower Devonian basin and basin-slope limestones, Copenhagen Canyon, Nevada
(Matti, J. C., *et al.*) 2(12): 575-577

Nevada—stratigraphy
Paleozoic: Early Paleozoic continental margin sedimentation, trilobite biofacies, and the thermocline, western United States
(Cook, H. E., *et al.*) 3(10): 559-562

Nevada—structural geology
tectonics: Basin and range rifting in northern Nevada; clues from a mid-Miocene rift and its subsequent offsets
(Zoback, M. L., *et al.*) 6(2): 111-116
— Late Cenozoic fault patterns and stress fields in the Great Basin and westward displacement of the Sierra Nevada Block
(Wright, L.) 4(8): 489-494
— Late Cenozoic fault patterns and stress fields in the Great Basin and westward displacement of the Sierra Nevada Block; discussion and reply
(Anderson, R. E., *et al.*) 5(7): 388-392
— Oregon-Nevada lineament
(Stewart, J. H., *et al.*) 3(5): 265-268
— Roberts Mountains thrust; gravity slide or underthrust?; discussion
(Johnson, J. G.) 3(4): 219-220
— Simulated "true color" images from ERTS data; comment
(Sales, J. K.) 2(10): 496

New Brunswick—stratigraphy
Cambrian: Correlation of the Cambrian-Ordovician boundary between the Acado-Baltic and North American faunal provinces
(Landing, E., *et al.*) 6(2): 75-78
Ordovician: Correlation of the Cambrian-Ordovician boundary between the Acado-Baltic and North American faunal provinces
(Landing, E., *et al.*) 6(2): 75-78

New England—stratigraphy
Cambrian: Significance of fossiliferous Middle Cambrian rocks of Rhode Island to the history of the Avalonian microcontinent
(Skehan, J. W., *et al.*) 6(11): 694-698

New Guinea—tectonophysics
crust: Southeastern Papua; generation of thick crust in a tensional environment?
(Milsom, J., *et al.*) 3(3): 117-120

New Jersey—geochronology
Jurassic: The Palisades Sill; a Jurassic intrusion? Evidence from $^{40}Ar/^{39}Ar$ incremental release ages
(Dallmeyer, R. D.) 3(5): 243-245

New Jersey—geomorphology
shore features: Anatomy of a shoreface-connected sand ridge on the New Jersey shelf; implications for the genesis of the shelf surficial sand sheet
(Stahl, L., *et al.*) 2(3): 117-120

New Jersey—stratigraphy
Ordovician: Paleomagnetism of the Beemerville (New Jersey) alkaline complex
(Proko, M. S., *et al.*) 1(4): 185-186

New Jersey—structural geology
foliation: Dewatering origin of cleavage in light of deformed calcite veins and clastic dikes in Martinsburg Slate, Delaware water gap, New Jersey
(Beutner, E. C., *et al.*) 5(2): 118-122

New Mexico—economic geology
geothermal energy: Status of the Los Alamos experiment to extract geothermal energy from hot dry rock
(Laughlin, A. W., *et al.*) 5(4): 237-240

New Mexico—geochronology
Paleocene: Biostratigraphy and magnetostratigraphy of Paleocene terrestrial deposits, San Juan Basin, New Mexico
(Lindsay, E. H., *et al.*) 6(7): 425-429
Paleozoic: Radiometric age determinations from the Florida Mountains, New Mexico
(Brookins, D. G.) 2(11): 555-557
Precambrian: Radiometric age determinations from the Florida Mountains, New Mexico
(Brookins, D. G.) 2(11): 555-557

New Mexico—geophysical surveys
gravity surveys: Gridded fault patterns in a late Cenozoic and a Paleozoic continental rift
(Ramberg, I. B., *et al.*) 3(4): 201-205
heat flow: Geothermal anomalies along the Rio Grande Rift in New Mexico
(Reiter, M., *et al.*) 6(2): 85-88

New Mexico—petrology
inclusions: High-viscosity "conglomerate" channel deposits in Tertiary lamprophyre sill, Sacramento Mountains, New Mexico
(Asquith, G. B.) 1(4): 149-151

New Mexico—sedimentary petrology
sedimentation: Remnant mountains in Early Ordovician seas of the El Paso region, Texas and New Mexico
(Kottlowski, F. E., *et al.*) 1(3): 137-140

New Mexico—stratigraphy
Paleocene: A middle Paleocene paleomagnetic pole from the Nacimiento Formation, San Juan Basin, New Mexico
(Butler, R. F., *et al.*) 6(8): 495-498

New Mexico—structural geology
faults: Geometry of Sierrita Fault and its bearing on tectonic development of the Rio Grande Rift, New Mexico
(Woodward, L. A., *et al.*) 3(3): 114-116
— Geometry of Sierrita Fault and its bearing on tectonic development of the Rio Grande Rift, New Mexico; discussion and reply
(Lins, T. W., *et al.*) 3(7): 357
— Penrose Conference report; geology of the Rio Grande Graben
(Cordell, L., *et al.*) 3(8): 420-421
neotectonics: Modern uplift associated with a proposed magma body in the vicinity of Socorro, New Mexico
(Reilinger, R., *et al.*) 4(10): 583-586
structural analysis: Subsurface extensions of the Santa Rita-Hanover Axis; a major early Tertiary structure, New Mexico
(Aldrich, M. J., Jr.) 6(6): 373-376
tectonics: Tectonic development of the northeast part of the Rio Puerco fault zone, New Mexico
(Slack, P. B.) 3(11): 665-668

New Mexico—tectonophysics
plate tectonics: Rate of crustal extension across the Rio Grande Rift near Albuquerque, New Mexico
(Woodward, L. A.) 5(5): 269-272

New South Wales—geomorphology
fluvial features: Initial bifurcation process in natural channel networks
(Abrahams, A. D.) 3(6): 307-308

New South Wales—petrology
igneous rocks: The Cooma Granodiorite, Australia; an example of in situ crustal anatexis?
(Flood, R. H., *et al.*) 6(2): 81-84
inclusions: Unique spinel-garnet lherzolite inclusion in kimberlite from Australia
(Ferguson, J., *et al.*) 5(5): 278-280

New York—engineering geology
waste disposal: Anthropogenic filling of the Hudson River (shelf) channel
(Williams, S. J.) 3(10): 597-600

New York—geomorphology
glacial geology: Bedrock control of ice-marginal positions in central New York
(Cadwell, D. H.) 6(5): 278-280
— Ribbed moraine-drumlin transition belt, St. Lawrence Valley, New York
(Carl, J. D.) 6(9): 562-566
mass movements: Erosion caused by intense rainfall in a small catchment in New York State
(Renwick, W. H.) 5(6): 361-364

New York—petrology
igneous rocks: Evaporites as precursors of massif anorthosite
(Gresens, R. L.) 6(1): 46-50

New York—sedimentary petrology
weathering: Fossil laterite on bedrock in Brooklyn, New York
(Blank, H. R.) 6(1): 21-24

New York—structural geology
deformation: "Slip" cleavage caused by pressure solution in a buckle fold
(Groshong, R. H., Jr.) 3(7): 411-413
foliation: Slaty cleavage and the dewatering hypothesis; an examination of some critical evidence
(Geiser, P. A.) 3(12): 717-720
tectonics: Chatham Fault; a reinterpretation of the contact relationships between the Giddings Brook and Chatham slices of the Taconic Allochthon in New York
(Ratcliffe, N. M., *et al.*) 4(1): 56-60
— Fossil distortion and decollement tectonics of the Appalachian Plateau
(Engelder, T., *et al.*) 5(8): 457-460
— Setting of alaskite bodies in the northwestern Adirondacks, New York
(Foose, M. P., *et al.*) 5(2): 77-80

New Zealand—stratigraphy
Quaternary: Special report; INQUA in New Zealand
(Fairbridge, R. W.) 2(10): 505-506

Newfoundland—geochronology
Cambrian: Ages of zircons from the Bay of Islands ophiolite complex, western Newfoundland
(Mattinson, J. M.) 4(7): 393-394
Paleozoic: Early Paleozoic ophiolite complexes of Newfoundland; isotopic ages of zircons
(Mattinson, J. M.) 3(4): 181-183
— Early Paleozoic ophiolite complexes of Newfoundland; isotopic ages of zircons; discussion and reply
(Williams, H., *et al.*) 3(8): 479
— Early Paleozoic ophiolite complexes of Newfoundland; isotopic ages of zircons; discussion and reply
(Church, W. R., *et al.*) 4(1): 7-8

Newfoundland—petrology
igneous rocks: Ages of zircons from the Bay of Islands ophiolite complex, western Newfoundland; discussion
(Church, W. R.) 4(10): 623-625

Newfoundland—structural geology
tectonics: Hermitage Flexure; figment or fact?
(Brown, P. A., *et al.*) 4(9): 561-564

Newfoundland—tectonophysics
plate tectonics: Amphibolite associated with Newfoundland ophiolite; its classification and tectonic significance
(Malpas, J., *et al.*) 1(1): 45-47
— Geophysical evidence for an east-dipping Appalachian subduction zone beneath Newfoundland
(Haworth, R. T., *et al.*) 6(9): 522-526

Niger—geochronology
Precambrian: New K-Ar age determinations from the West African Shield in the Niger Republic
(Brunnschweiler, R. O.) 2(1): 17-20

nodules—ferromanganese composition
properties: Magnetic spherules from the Mid-Atlantic Ridge
(Aumento, F., *et al.*) 3(7): 407-410

North America *see also* Appalachians; Atlantic Coastal Plain; Canada; Great Lakes region; Great Plains; Gulf Coastal Plain; Mexico; Rocky Mountains; United States

North America—geochronology
Pleistocene: Support for a stable late Wisconsin ice margin (14,000 to ≈9000 B.P.); a test based on glacial rebound
(Andrews, J. T.) 3(11): 617-620

North America—paleontology
Invertebrata: Extinction of perched faunas
(Johnson, J. G.) 2(10): 479

North America—stratigraphy
biogeography: Endemism and similarity indices; clues to the zoogeography of North American Mississippian corals
(Sando, W. J., *et al.*) 3(11): 661-664
continental drift: Late Precambrian evolution of North America; plate tectonics implication
(Stewart, J. H.) 4(1): 11-15
Phanerozoic: A new technique for constructing apparent polar wander paths and the revised Phanerozoic path for North America
(Van Alstine, D. R., *et al.*) 6(3): 137-139
Proterozoic: Late Precambrian evolution of North America; plate tectonics implications; discussion and reply
(Mattis, A. F., *et al.*) 4(6): 325-326

North America—structural geology
tectonics: Ancient southern margin of North America
(King, P. B.) 3(12): 732-734
— Ancient southern margin of North America; discussion and reply
(Belderson, R. H., *et al.*) 4(4): 196-197
— Areas and volumes of cratonic sediments, western North America and eastern Europe; discussion and reply
(Bond, G., *et al.*) 5(7): 393-394
— Evidence for continental subsidence in North America during the Late Cretaceous global submergence
(Bond, G.) 4(9): 557-560
— Structural evolution of the Keweenawan Province; abstr.
(Craddock, C.) 1(4): 190

North America—tectonophysics
continental drift: A middle Paleocene paleomagnetic pole from the Nacimiento Formation, San Juan Basin, New Mexico
(Butler, R. F., *et al.*) 6(8): 495-498
— Triassic-Jurassic faulting in eastern North America; a model based on pre-Triassic structures
(Lindholm, R. C.) 6(6): 365-368
mantle: Do some eastern Appalachian ultramafic rocks represent mantle diapirs produced above a subduction zone?
(Stevens, R. K., *et al.*) 2(4): 175-178
plate tectonics: Deep-Sea drilling for landlubber geologists; the Southwest Pacific, and accordion plate tectonics analog for the Cordilleran Geosyncline
(Churkin, M., Jr.) 2(7): 339-342
— Late Precambrian evolution of North America; plate tectonics implication
(Stewart, J. H.) 4(1): 11-15
— Late Precambrian evolution of North America; plate tectonics implications; discussion and reply
(Mattis, A. F., *et al.*) 4(6): 325-326
— Penrose Conference report; Gulf of California rift system and its implications for the tectonics of western North America
(Elders, W. A. (convener), *et al.*) 3(2): 85-87

North Carolina—geochronology
Cretaceous: Rb-Sr glauconite isochron, Maestrichtian unit of Peedee Formation (Upper Cretaceous), North Carolina
(Harris, W. B.) 4(12): 761-762

North Carolina—geophysical surveys
electrical surveys: Deep exploration of an East-Coast Triassic basin using electrical resistivity
(Ackermann, H. D., *et al.*) 4(3): 137-140

North Sea—sedimentary petrology
diagenesis: Destructive diagenesis of carbonate sediments in the eastern Skagerrak, North Sea
(Alexandersson, E. T.) 6(6): 324-327

North Sea—stratigraphy
Cretaceous: The terminal Cretaceous event; a geologic problem with an oceanographic solution
(Gartner, S., *et al.*) 6(12): 708-712

Northern Hemisphere *see also* Africa; Arctic Ocean; Asia; Atlantic Ocean; Central America; Eurasia; Europe; North America; Pacific Ocean; USSR

Northern Hemisphere—stratigraphy
continental drift: Reconsideration of paleomagnetic data in terms of wandering continents and a stable magnetic pole
(Cordell, L.) 2(7): 363

Northern Hemisphere—structural geology
tectonics: Areas and volumes of cratonic sediments, western North America and eastern Europe
(Sloss, L. L.) 4(5): 272-276
— The Siberian connection; a case for Precambrian separation of the North American and Siberian cratons
(Sears, J. W., *et al.*) 6(5): 267-270

Northern Hemisphere—tectonophysics
crust: Possible galactic causes for synchronous sedimentation sequences of the North American and eastern European cratons
(Steiner, J.) 1(2): 89-92
plate tectonics: Reconsideration of paleomagnetic data in terms of wandering continents and a stable magnetic pole
(Cordell, L.) 2(7): 363
— The Siberian connection; a case for Precambrian separation of the North American and Siberian cratons
(Sears, J. W., *et al.*) 6(5): 267-270

Northern Territory—stratigraphy
Quaternary: Late Quaternary sea-level changes, Gulf of Carpentaria, Australia
(Smart, J.) 5(12): 755-759

Northwest Territories—geochemistry
sodium: Sodium; paleosalinity indicator in ancient carbonate rocks
(Veizer, J., *et al.*) 5(3): 177-179

Northwest Territories—geochronology
Pleistocene: Proposed extent of late Wisconsin Laurentide ice on eastern Baffin Island
(Miller, G. H., *et al.*) 2(3): 125-130

Northwest Territories—geomorphology
glacial geology: Anomalous local glacier activity, Baffin Island, Canada; paleoclimatic implications
(Miller, G. H.) 4(8): 502-504

Northwest Territories—petrology
intrusions: Origin of chromitite layers in the Muskox Intrusion and other stratiform intrusions; a new interpretation
(Irvine, T. N.) 5(5): 273-277

Northwest Territories—sedimentary petrology
reefs: Former magnesian calcite and aragonite submarine cements in upper Paleozoic reefs of the Canadian Arctic; a summary
(Davies, G. R.) 5(1): 11-15
sedimentation: Subaqueous evaporites of the Carboniferous Otto Fiord Formation, Canadian Arctic Archipelago; a summary
(Davies, G. R., *et al.*) 3(5): 273-278

Northwest Territories—stratigraphy
Proterozoic: Paleolatitude of glaciogenic upper Precambrian Rapitan Group and the use of tillites as chronostratigraphic marker horizons
(Morris, W. A.) 5(2): 85-88
— Paleolatitude of glaciogenic upper Precambrian Rapitan Group and the use of tillites as chronostratigraphic marker horizons; discussion and reply
(Williams, G. E., *et al.*) 6(1): 4-9

Northwest Territories—structural geology
tectonics: Mackenzie tectonic arc; reflection of early basin configuration?
(Aitken, J. D., *et al.*) 6(10): 626-629

Northwest Territories—tectonophysics
mantle: Collapse of the Hudson Bay ice center and glacio-isostatic rebound
(Andrews, J. T., *et al.*) 4(2): 73-75

Norway—petrology
lava: Variolitic structure in Ordovician pillow lava and its possible significance as an environmental indicator
(Furnes, H.) 1(1): 27-30

Norway—structural geology
faults: Gridded fault patterns in a late Cenozoic and a Paleozoic continental rift
(Ramberg, I. B., *et al.*) 3(4): 201-205

nuclear facilities *see also under* engineering geology *under* Rhode Island; Wisconsin

ocean basins *see* ocean basins *under* oceanography *under* Arctic Ocean; Pacific Ocean

ocean circulation *see* ocean circulation *under* oceanography *under* Atlantic Ocean; Pacific Ocean

ocean circulation—tides
effects: Westward tidal lag as the driving force of plate tectonics
(Moore, G. W.) 1(3): 99-100
— Westward tidal lag; comment
(Howell, B. F., Jr.) 2(1): 28

ocean floors *see* ocean floors *under* oceanography *under* Atlantic Ocean; Caribbean Sea; Gulf of Mexico; Mediterranean Sea; Pacific Ocean

ocean floors—mid-ocean ridges
geochemistry: Magnesium metasomatism during hydrothermal alteration of new oceanic crust
(Bloch, S., *et al.*) 6(5): 275-277
hydrothermal processes: Thermal contraction and alteration of the oceanic crust
(Epp, D., *et al.*) 6(12): 726-728

ocean floors—mineral resources
exploration: Self-potential prospecting in the deep oceans
(Brewitt-Taylor, C. R.) 3(9): 541-542
metallogeny: Manganese deposited by submarine hot springs in chert-greenstone complexes, western United States
(Snyder, W. S.) 6(12): 741-744

ocean floors—trenches
sedimentation: Steady-state trenches?; discussion and reply
(Moore, G. F., *et al.*) 3(4): 221-223
steady-state processes: Steady-state trenches?
(Helwig, J., *et al.*) 2(7): 309-316

oceanography—techniques
comparison: Comparison between sieving and settling-tube determinations of sand sizes by using discriminant analysis
(Jones, J. R., *et al.*) 4(12): 741-744
— Comparison between sieving and settling-tube determinations of sand sizes by using discriminant analysis; discussion
(Fisher, J. J.) 5(5): 264
sampling: Selection of sample intervals in deep-sea sedimentary cores
(Ledbetter, M. T., *et al.*) 4(5): 303-304

Ohio—environmental geology
reclamation: Determination of spoil-bank erosion rates in Ohio by using interbank sediment accumulations
(McKenzie, G. D., *et al.*) 6(8): 499-502

oil and gas fields *see* oil and gas fields *under* economic geology *under* Oklahoma

oil shale *see also under* economic geology *under* Western U.S.

Okhotsk Sea—oceanography
marine geology: Sea of Okhotsk; thirteenth cruise of the Dmitry Mendeleev
(Burk, C. A.) 3(3): 140-144

Oklahoma—economic geology
oil and gas fields: Recognition of petroleum-bearing traps by unusual isotopic compositions of carbonate-cemented surface rocks
(Donovan, T. J., *et al.*) 2(7): 351-354

Oklahoma—structural geology
tectonics: Igneous cumulates of the Wichita Province and their tectonic implications
(Powell, B. N., *et al.*) 5(1): 52-56

Oklahoma—tectonophysics
plate tectonics: Plate tectonics models for the Ouachita Foldbelt
(Wickham, J. S., *et al.*) 4(3): 173-176
— Plate tectonics models for the Ouachita Foldbelt; discussion and replies
(Cebull, S. E., *et al.*) 4(10): 636-638

Oligocene *see also under* geochronology *under* Alaska; Himalayas; Nepal
Oligocene—stratigraphy
boundary: Status of late Cenozoic boundaries
(Van Couvering, J. A.) 6(3): 169
olistostromes *see* olistostromes *under* soft sediment deformation *under* sedimentary structures
Oman—tectonophysics
plate tectonics: Mineralized fault zone parallel to the Oman ophiolite spreading axis
(Smewing, J. D., *et al.*) 5(9): 534-538
Ontario—geochemistry
trace elements: Genesis of Archean komatiites from Munro Township, Ontario; trace-element evidence
(Arth, J. G., *et al.*) 5(10): 590-594
Ontario—paleontology
conodonts: Recognizing the conodont assemblage Amorphognathus by correlation coefficient
(Winder, C. G.) 2(6): 299-300
Ontario—stratigraphy
Proterozoic: Huronian glaciation and polar wander from the Gowganda Formation, Ontario
(Symons, D. T. A.) 3(6): 303-306
ooze *see under* carbonate sediments *under* sediments
ophiolite *see under* genesis *under* metamorphic rocks; *see* ophiolite *under* ultramafic family *under* igneous rocks
Ordovician *see also under* geochronology *under* England; *see also under* stratigraphy *under* Arkansas; Canada; New Brunswick; New Jersey
Ordovician—geochronology
time scales: Subdivision of Ordovician and Silurian time scale using accumulation rates of graptolitic shale
(Churkin, M., Jr., *et al.*) 5(8): 452-456
Oregon—engineering geology
slope stability: Impact of clear-cutting and road construction on soil erosion by landslides in the western Cascade Range, Oregon
(Swanson, F. J., *et al.*) 3(7): 393-396
Oregon—geochemistry
lava: Strontium, rubidium, potassium, and calcium variations in Quaternary lavas, Crater Lake, Oregon, and their residual glasses
(Noble, D. C., *et al.*) 2(4): 187-190
Oregon—geochronology
Neogene: Episodic volcanism in the central Oregon Cascade Range; confirmation and correlation with the Snake River plain; discussion
(Armstrong, R. L.) 3(7): 356-357
Oregon—paleontology
Mammalia: Horse genealogy; the Oregon connection
(Drake, E. T.) 6(10): 587-591
Oregon—petrology
volcanology: Episodic volcanism in the central Oregon Cascade Range
(McBirney, A. R., *et al.*) 2(12): 585-589
Oregon—stratigraphy
Eocene: Paleomagnetic evidence for tectonic rotation of the Oregon Coast Range
(Simpson, R. W., *et al.*) 5(10): 585-589
Oregon—structural geology
tectonics: Oregon-Nevada lineament
(Stewart, J. H., *et al.*) 3(5): 265-268
organic materials—amino acids
alteration: Pleistocene stratigraphy in southern Florida based on amino acid diagenesis in fossil Mercenaria
(Mitterer, R. M.) 2(9): 425-428
organic materials—genesis
life: "Humic" matter in the bitumen of ancient sediments: variations through geologic time; a new approach to the study of pre-Paleozoic (Precambrian) life
(Jackson, T. A.) 1(4): 163-166
organic materials—hydrocarbons
abundance: Baseline concentrations of hydrocarbons in barrier-island quartz sand, northeastern Gulf of Mexico
(Palacas, J. G., *et al.*) 4(2): 81-84
methane: Methane production and consumption in anoxic marine sediments
(Barnes, R. O., *et al.*) 4(5): 297-300
organic materials—kerogen
alteration: Metamorphic alteration of carbon isotopic composition in ancient sedimentary organic matter; new evidence from Australia and South Africa
(McKirdy, D. M., *et al.*) 2(12): 591-595
orogeny *see also* epeirogeny; geosynclines
orogeny—absolute age
Caledonian Orogeny: Evidence for basement of late Precambrian age in the Caledonides of western Ireland
(van Breemen, O., *et al.*) 4(8): 499-501
Himalayan Orogeny: Rb-Sr systematics in granite from central Nepal (Manaslu); significance of the Oligocene age and high $^{87}Sr/^{86}Sr$ ratio in Himalayan Orogeny
(Hamet, J., *et al.*) 4(8): 470-472
orogeny—causes
concepts: Relation in time between eustacy and orogeny; a presently indeterminate problem; reply
(Rona, P. A.) 2(4): 201-202
— Sea-floor spreading and orogeny; correlation or anticorrelation?; discussion
(Johnson, J. G.) 2(4): 199-201
plate tectonics: Hot spots and continental break-up; implications for collisional orogeny
(Dewey, J. F., *et al.*) 2(2): 57-60
orogeny—evolution
Alpine Orogeny: Where are the passive margins of the western Tethys Ocean?
(Le Pichon, X., *et al.*) 6(10): 597-600
Caledonian Orogeny: Sub-Cenozoic geology of the British continental margin (lat 50°N to 57°N) and the reassembly of the North Atlantic late Paleozoic supercontinent
(Bailey, R. J.) 3(10): 591-594
Cordilleran Orogeny: Has there been an oceanic margin to western North American since Archean time?
(Badham, J. P. N.) 6(10): 621-625
— Penrose Conference report; Late orogenic sedimentation and tectonics of the Cordilleran and Appalachian orogens
(Eisbacher, G. H., *et al.*) 4(8): 458
orogeny—mechanism
Appalachian Orogeny: Continental collisions in the Appalachian-Caledonian orogenic belt; variations related to complete and incomplete suturing
(Dewey, J. F., *et al.*) 2(11): 543-546
Caledonian Orogeny: Possible "Caledonian" subduction under the Domnonean domain, North Armorican area
(Lefort, J. P.) 5(9): 523-526
concepts: Concept of orogeny
(Cebull, S. E.) 1(3): 101-102
— Concept of orogeny; discussion and reply
(Wang, C. S., *et al.*) 4(7): 388-389
— Discussion of the concept of orogeny
(King, P. B.) 2(1): 24
Hercynian Orogeny: Microplate tectonics, oblique collisions, and evolution of the Hercynian orogenic systems
(Badham, J. P. N., *et al.*) 3(7): 373-376
Laramide Orogeny: Plate tectonics and foreland basement deformation
(Lowell, J. D.) 2(6): 275-278
— Plate tectonics and foreland basement deformation; discussion and reply
(Woodward, L. A., *et al.*) 2(12): 570-571
orogenic belts: A plate tectonics origin for late Precambrian-Paleozoic orogenic belt in Morocco
(Hurley, P. M., *et al.*) 2(7): 343-344
— Pangeaic orogenic system
(Hurley, P. M.) 2(8): 373-376

orogeny—periodicity
Alpine Orogeny: Evolution of the Eastern Alps; a plate tectonics working hypothesis
(Dietrich, V.) 4(3): 147-152
orthosilicates *see* orthosilicates *under* minerals
oxides *see under* minerals
oxygen—isotopes
O-18/O-16: Carbon and oxygen isotopes as diagenetic and stratigraphic tools; surface and subsurface data, Barbados, West Indies
(Allan, J. R., *et al.*) 5(1): 16-20
— Extension of the radiolarian Stylatractus universus as a biostratigraphic datum to the Atlantic Ocean
(Morley, J. J., *et al.*) 6(5): 309-311
— Global synchroneity of late Quaternary coccolith datum levels; validation by oxygen isotopes
(Thierstein, H. R., *et al.*) 5(7): 400-404
— Globally synchronous extinction of the radiolarian Stylatractus universus
(Hays, J. D., *et al.*) 4(11): 649-652
— The late Pleistocene record of productivity fluctuations in the eastern equatorial Pacific Ocean
(Adelseck, C. G., Jr., *et al.*) 6(7): 388-391
Pacific Coast—geophysical surveys
acoustical surveys: Initial deep-sea sediment deformation at the base of the Washington continental slope; response to subduction
(Carson, B., *et al.*) 2(11): 561-564
Pacific Coast—hydrogeology
thermal waters: Geothermal prospecting in The Geysers-Clear Lake area, northern California
(Goff, F. E., *et al.*) 5(8): 509-515
Pacific Coast—stratigraphy
Tertiary: Origin and configuration of the oxidized zone in Tertiary formations, Death Valley region, California
(Wilson, J. L., *et al.*) 5(11): 696-698
Pacific Coast—structural geology
neotectonics: Upper mantle origin of Sierra Nevada uplift
(Crough, S. T., *et al.*) 5(7): 396-399
tectonics: Intracontinental plate boundary east of Cape Mendocino, California
(Herd, D. G.) 6(12): 721-725
— Significance of Mesozoic radiolarians from the pre-Nevadan rocks of the southern Klamath Mountains, California
(Irwin, W. P., *et al.*) 5(9): 557-562
Pacific Coast—tectonophysics
isostasy: Cenozoic uplifting of the Sierra Nevada in isostatic response to North American and Pacific plate interactions
(Hay, E. A.) 4(12): 763-766
plate tectonics: Curvature of the San Andreas Fault, California
(Woodford, A. O., *et al.*) 4(9): 573-575
— Curvature of the San Andreas Fault, California; discussion and reply
(Citron, G. P., *et al.*) 5(6): 324-325
— Franciscan limestones and their environments of deposition
(Wachs, D., *et al.*) 3(1): 29-33
— Franciscan limestones and their environments of deposition; discussion and reply
(Raymond, L. A., *et al.*) 3(6): 294-296
— Hypothesis suggesting 700 km of right slip in California along northwest-oriented faults; reply
(Howell, D. G.) 4(10): 632-633
— Neogene tectonic evolution of the Salinian Block, West-central California
(Johnson, J. D., *et al.*) 2(1): 11-14
— Neogene tectonic evolution of the Salinian Block, West-central California; discussion
(Howell, D. G.) 4(9): 520
— Paleomagnetic evidence for tectonic rotation of the Oregon Coast Range
(Simpson, R. W., *et al.*) 5(10): 585-589
— Significance of coexisting lawsonite, prehnite, and aragonite in the San Juan Islands, Washington
(Glassley, W. E., *et al.*) 4(5): 301-302
— Triassic blueschist from northern California and North-central Oregon
(Hotz, P. E., *et al.*) 5(11): 659-663
Pacific Ocean *see also* Bering Sea; Gulf of California; Japan Sea; Okhotsk Sea; Polynesia
Pacific Ocean—geochronology
Neogene: Cenozoic magnetic time scale in deep-sea cores; completion of the Neogene
(Theyer, F., *et al.*) 2(10): 487-492
Pacific Ocean—geophysical surveys
acoustical surveys: Deep-sea carbonates; acoustic reflectors and lysocline fluctuations
(Berger, W. H., *et al.*) 6(1): 11-15
seismic surveys: Buried trench south of the Gulf of Panama
(Lowrie, A.) 6(7): 434-436
— Evidence for northward movement of the Emperor Seamounts
(Greene, H. G., *et al.*) 6(2): 70-74
— Late Quaternary sedimentation in the active eastern Aleutian Trench
(Piper, D. J. W., *et al.*) 1(1): 19-22
— Tholeiitic basalt ridge in the Peru Trench
(Kulm, L. D., *et al.*) 1(1): 11-14
surveys: Kana Keoki fracture zone; interaction with the Hawaiian Ridge
(Handschumacher, D. W., *et al.*) 3(1): 25-28
Pacific Ocean—oceanography
ocean basins: Hydrocarbon potential of marginal basins bounded by an island arc
(Schlanger, S. O., *et al.*) 3(7): 397-400
ocean circulation: Current-meter recordings of low-speed turbidity currents
(Shepard, F. P., *et al.*) 5(5): 297-301
— Possible rip current origin for bottom ripple zones to 30-m depth
(Reimnitz, E., *et al.*) 4(7): 395-400
ocean floors: Delineation of the main extrusion zone of the East Pacific Rise at lat 21°N
(Normark, W. R.) 4(11): 681-685
— Estimation of hydrothermal manganese input to the oceans
(Lyle, M.) 4(12): 733-736
— Evidence for northward movement of the Emperor Seamounts
(Greene, H. G., *et al.*) 6(2): 70-74
— Model for the formation of topographic features of the East Pacific Rise crest
(Rea, D. K.) 3(2): 77-80
— Research submersible reconnaissance of Cobb Seamount
(Schwartz, M. L., *et al.*) 1(1): 31-32
— Sand-wave fields in Taiwan Strait
(Boggs, S., Jr.) 2(5): 251-253
— Tectonic significance of the Kodiak-Bowie seamount chain, northeastern Pacific
(Silver, E. A., *et al.*) 2(3): 147-150
— Tholeiitic basalt ridge in the Peru Trench
(Kulm, L. D., *et al.*) 1(1): 11-14
— Uplifted turbidite basins on the seaward wall of the Peru Trench
(Prince, R. A., *et al.*) 2(12): 607-611
sedimentation: Cenozoic calcium carbonate distribution and calcite compensation depth in the central equatorial Pacific Ocean
(Van Andel, T. H., *et al.*) 2(2): 87-92
— Preservation of diatoms in glacial to Holocene deep-sea sediments of the equatorial Pacific
(Mikkelsen, N.) 6(9): 553-555
— Resedimented pelagic carbonate and volcaniclastic sediments and sedimentary structures in Leg 30 DSDP cores from the western equatorial Pacific
(Klein, G. deV.) 3(1): 39-42
sediments: Distribution of opal and quartz on the ocean floor of the subtropical southeastern Pacific
(Molina-Cruz, A., *et al.*) 5(2): 81-84
— Interstitial silica in deep-sea sediments from the North Pacific
(Heath, G. R., *et al.*) 1(4): 181-184

Pacific Ocean—stratigraphy
changes of level: Age of the South Bight II marine transgression at Amchitka Island, Aleutians
(Szabo, B. J., *et al.*) 3(8): 457-459
Cretaceous: Late Cretaceous reversal sequence
(Keating, B., *et al.*) 3(2): 73-76
Pleistocene: Pacific Pleistocene sediments; planktonic foraminifera dissolution cycles and geochronology
(Thompson, P. R., *et al.*) 2(7): 333-335
— The late Pleistocene record of productivity fluctuations in the eastern equatorial Pacific Ocean
(Adelseck, C. G., Jr., *et al.*) 6(7): 388-391
Pliocene: Pliocene closing of the Isthmus of Panama, based on biostratigraphic evidence from nearby Pacific Ocean and Caribbean Sea cores
(Keigwin, L. D., Jr.) 6(10): 630-634

Pacific Ocean—tectonophysics
plate tectonics: Abyssal pahoehoe with lava coils at the Galapagos Rift
(Lonsdale, P.) 5(3): 147-152
— Buried trench south of the Gulf of Panama
(Lowrie, A.) 6(7): 434-436
— Cenozoic migration of the Pacific Plate, northward shift of the axis of deposition, and paleobathymetry of the central equational Pacific
(Van Andel, T. H.) 2(10): 507-510
— Compressional faulting of the oceanic crust prior to subduction in the Peru-Chile Trench
(Hussong, D. M., *et al.*) 3(10): 601-604
— Estimation of hydrothermal manganese input to the oceans
(Lyle, M.) 4(12): 733-736
— Initial deep-sea sediment deformation at the base of the Washington continental slope; response to subduction
(Carson, B., *et al.*) 2(11): 561-564
— Petrology and chemistry of Guadalupe Island; an alkalic seamount on a fossil ridge crest
(Batiza, R.) 5(12): 760-764
— Tectonic evolution of the northern Cocos Plate
(Lynn, W. S., *et al.*) 4(12): 718-722
— Tectonic significance of the Kodiak-Bowie seamount chain, northeastern Pacific
(Silver, E. A., *et al.*) 2(3): 147-150
— Upper Cretaceous arc-trench gap sedimentation on the Alaska Peninsula
(Mancini, E. A., *et al.*) 6(7): 437-439
sea-floor spreading: Delineation of the main extrusion zone of the East Pacific Rise at lat 21°N
(Normark, W. R.) 4(11): 681-685
— Evidence of local migration of a spreading center
(Blakely, R. J.) 3(1): 35-38
— Geologic evolution of the Northern Nazca Plate
(Rea, D. K., *et al.*) 2(7): 317-320

Pacific region—tectonophysics
plate tectonics: Absolute motion of the Eurasian Plate; a problem in vector geometry
(Grette, J. F., *et al.*) 2(11): 527-528
— Absolute motion of the Eurasian plate; a problem in vector geometry; discussion
(Seeger, C. R.) 3(3): 159
— Hydrocarbon potential of marginal basins bounded by an island arc
(Schlanger, S. O., *et al.*) 3(7): 397-400
— Neogene acceleration of subsidence rates in southern California
(Yeats, R. S.) 6(8): 456-460
— Triple junctions as a cause for anomalously near-trench igneous activity between the trench and volcanic arc
(Marshak, R. S., *et al.*) 5(4): 233-236

Pakistan—tectonophysics
plate tectonics: Makran of Iran and Pakistan as an active arc system
(Farhoudi, G., *et al.*) 5(11): 664-668

paleobotany—evolution
concepts: The advent of land plant life
(Gray, J., *et al.*) 6(8): 489-492

Paleocene *see also under* geochronology *under* Montana; New Mexico; *see also under* stratigraphy *under* Italy; New Mexico

paleoclimatology—Cambrian
Wisconsin: Cambrian tropical storm waves in Wisconsin; discussions and reply
(Novak, I. D., *et al.*) 2(12): 572

paleoclimatology—Cenozoic
Pacific Ocean: Evidence for northward movement of the Emperor Seamounts
(Greene, H. G., *et al.*) 6(2): 70-74

paleoclimatology—Holocene
Northwest Territories: Anomalous local glacier activity, Baffin Island, Canada; paleoclimatic implications
(Miller, G. H.) 4(8): 502-504
Quebec: Isostasy and eustasy of Hudson Bay
(Hillaire-Marcel, C., *et al.*) 6(2): 117-122

paleoclimatology—Mesozoic
Connecticut: Paleosol caliche in the New Haven Arkose, Connecticut; record of semiaridity in Late Triassic-Early Jurassic time
(Hubert, J. F.) 5(5): 302-304

paleoclimatology—Miocene
Mediterranean Sea: The salt that was
(Schreiber, B. C., *et al.*) 5(9): 527-528

paleoclimatology—Pleistocene
Alaska: Interstadial mammoth remains and associated pollen and insect fossils, Kotzebue Sound area, northwestern Alaska
(Hopkins, D. M., *et al.*) 4(3): 169-172
Illinois: Distant source of 1976 dustfall in Illinois and Pleistocene weather models
(Van Heuklon, T. K.) 5(11): 693-695
Northwest Territories: Proposed extent of late Wisconsin Laurentide ice on eastern Baffin Island
(Miller, G. H., *et al.*) 2(3): 125-130
Pacific Ocean: Pacific Pleistocene sediments; planktonic foraminifera dissolution cycles and geochronology
(Thompson, P. R., *et al.*) 2(7): 333-335

paleoclimatology—Pliocene
Antarctic Ocean: Early Pliocene temperature changes in the Antarctic seas
(Ciesielski, P. F., *et al.*) 2(10): 511-515

paleoclimatology—Quaternary
Arctic Ocean: Arctic Ocean foraminifera abundance and its relationship to equatorial Pacific Ocean solution cycles
(Larson, J. A.) 3(9): 491-492
Chile: Quaternary glaciations and environments of northern Isla Chiloe, Chile
(Heusser, C. J., *et al.*) 5(5): 305-308
Florida: A late Quaternary record of vegetation from Lake Annie, South-central Florida
(Watts, W. A.) 3(6): 344-346
— Recent ice age in Florida?; discussion and reply
(Bradley, R. S., *et al.*) 4(4): 197-198
— Return of the ice age and drought in peninsular Florida
(Moran, J. M.) 3(12): 695-696
Gulf of Mexico: Optimum indices of calcium carbonate dissolution in deep-sea sediments
(Thunell, R. C.) 4(9): 525-528
Mexico: Influence of climate on the early diagenesis of carbonate eolianites
(Ward, W. C.) 1(4): 171-174

paleoclimatology—temperature
indicators: Sclerochronology; a tool for interpreting past environments
(Hudson, J. H., *et al.*) 4(6): 361-364
— The tropical cyclone as a global climatic stabilizing mechanism
(Adam, D. P.) 3(11): 625-626

paleoecology—algae
Pleistocene: Isochronous last-abundant-appearance datum (LAAD) of the diatom Hemidiscus karstenii in the Sub-Antarctic
(Burckle, L. H., *et al.*) 6(4): 243-246

paleoecology—Brachiopoda
Silurian: The depths inhabited by Silurian brachiopod communities; discussion and reply
(Shabica, S. V., *et al.*) 4(3): 132,187-191
— The depths inhabited by Silurian brachiopod communities; discussion and reply
(Hurst, J. M., *et al.*) 4(12): 709-712

paleoecology—Cenozoic
Pacific Ocean: Evidence for northward movement of the Emperor Seamounts
(Greene, H. G., *et al.*) 6(2): 70-74

paleoecology—changes
glacial environment: Pleistocene plagues?
(Spirakis, C. S.) 3(7): 372

paleoecology—Coelenterata
Holocene: Thickest recorded Holocene reef section, Isla Perez core hole, Alacran Reef, Mexico
(Macintyre, I. G., *et al.*) 5(12): 749-754

paleoecology—Cretaceous
Arctic Ocean: The terminal Cretaceous event; a geologic problem with an oceanographic solution
(Gartner, S., *et al.*) 6(12): 708-712

paleoecology—Eocene
Wyoming: Fossil catfish and the depositional environment of the Green River Formation, Wyoming
(Buchheim, H. P., *et al.*) 5(4): 196-198

paleoecology—foraminifera
Pleistocene: Arctic Ocean foraminifera abundance and its relationship to equatorial Pacific Ocean solution cycles
(Larson, J. A.) 3(9): 491-492
Pliocene: Pliocene closing of the Isthmus of Panama, based on biostratigraphic evidence from nearby Pacific Ocean and Caribbean Sea cores
(Keigwin, L. D., Jr.) 6(10): 630-634

paleoecology—indicators
reefs: Sclerochronology; a tool for interpreting past environments
(Hudson, J. H., *et al.*) 4(6): 361-364

paleoecology—interpretation
communities: Why 'communities'; comment
(Phillips, J.) 2(1): 28
— Why "communities"?; with discussion
(Watkins, R., *et al.*) 1(2): 55-60
extinction: A reflection on genetic extinction, and the "killer clam"
(Bretsky, P. W.) 1(4): 157
— Genetic extinction hypothesis and its critics
(Levinton, J. S.) 1(4): 157-158
— On scientific hypotheses, killer clams, and extinction; discussion
(Valentine, J. W., *et al.*) 2(2): 69-71
— Why 'communities?; comment
(Boucot, A. J.) 2(4): 204

paleoecology—Invertebrata
Paleozoic: Extinction of perched faunas; discussion and reply
(Pitrat, C. W., *et al.*) 3(5): 228-230
Permian: Catastrophe theory; application to the Permian mass extinction
(Lantzy, R. J., *et al.*) 5(12): 724-728
— Catastrophe theory; application to the Permian mass extinction
(Borchardt, G., *et al.*) 6(8): 453-454
— Catastrophe theory; application to the Permian mass extinction
(Boucot, A. J., *et al.*) 6(11): 646-647
phanerozoic: Extinction of perched faunas
(Johnson, J. G.) 2(10): 479

paleoecology—Mesozoic
California: Franciscan limestones and their environments of deposition
(Wachs, D., *et al.*) 3(1): 29-33
— Franciscan limestones and their environments of deposition; discussion and reply
(Raymond, L. A., *et al.*) 3(6): 294-296

paleoecology—Mollusca
Cretaceous: Epifaunal zonation on an Upper Cretaceous rocky coast
(Surlyk, F., *et al.*) 2(11): 529-534

paleoecology—Plantae
Silurian: The advent of land plant life
(Gray, J., *et al.*) 6(8): 489-492

paleoecology—Pleistocene
Alaska: Interstadial mammoth remains and associated pollen and insect fossils, Kotzebue Sound area, northwestern Alaska
(Hopkins, D. M., *et al.*) 4(3): 169-172

paleoecology—Proterozoic
Montana: Bioturbation and the origin of the metazoans; evidence from the Belt Supergroup, Montana
(Byers, C. W.) 4(9): 565-567

paleoecology—Trilobita
Paleozoic: Early Paleozoic continental margin sedimentation, trilobite biofacies, and the thermocline, western United States
(Cook, H. E., *et al.*) 3(10): 559-562

Paleogene *see also under* geochronology *under* Greenland; *see* Paleogene *under* stratigraphy *under* Arctic Ocean; California

Paleogene—tectonophysics
plate tectonics: An alternative model for early Tertiary absolute plate motions
(Jurdy, D. M.) 6(8): 469-472

paleogeography—Cambrian
Wisconsin: Cambrian tropical storm waves in Wisconsin
(Dott, R. H., Jr.) 2(5): 243-246

paleogeography—changes
reconstruction: Permian-Triassic continental configurations and the origin of the Gulf of Mexico; discussion
(Holden, J. C.) 4(6): 324-325

paleogeography—Cretaceous
Arctic Ocean: The terminal Cretaceous event; a geologic problem with an oceanographic solution
(Gartner, S., *et al.*) 6(12): 708-712
Honduras: Paleomagnetic results from Cretaceous sediments in Honduras; tectonic implications
(Gose, W. A., *et al.*) 5(8): 505-508
Sweden: Epifaunal zonation on an Upper Cretaceous rocky coast
(Surlyk, F., *et al.*) 2(11): 529-534

paleogeography—Devonian
Midwest: Middle Devonian paleogeography of the Wabash Platform, Indiana, Illinois, and Ohio
(Droste, J. B., *et al.*) 3(5): 269-272
— Middle Devonian paleogeography of the Wabash Platform, Indiana, Illinois, and Ohio; discussion
(Sparling, D. R.) 3(12): 677-678

paleogeography—Eocene
Oregon: Paleomagnetic evidence for tectonic rotation of the Oregon Coast Range
(Simpson, R. W., *et al.*) 5(10): 585-589

paleogeography—Holocene
Arctic Ocean: Displacement of Yukon-derived sediment from Bering Sea to Chukchi Sea during Holocene time
(Nelson, H., *et al.*) 5(3): 141-146

paleogeography—interpretation
coastal environment: Speculations on real sea-level changes and vertical motions of continents at selected times in the Cretaceous and Tertiary periods
(Bond, G.) 6(4): 247-250

paleogeography—Mesozoic
Atlantic Ocean: Atlantic evaporites formed by evaporation of water spilled from Pacific, Tethyan, and Southern oceans
(Burke, K.) 3(11): 613-616
British Columbia: Oceanic crust and arc-trench gap tectonics in southwestern British Columbia
(Anderson, P.) 4(7): 443-446
— Oceanic crust and arc-trench gap tectonics in southwestern British Columbia; discussion and reply
(Cole, M. R., *et al.*) 5(6): 325-329

Southern Hemisphere: Plate-tectonic model for southern Antarctic Peninsula and its relation to southern Andes
(Suarez, M.) 4(4): 211-214

paleogeography—Miocene
Japan: Implications of late Neogene fresh-water sediment in the Sea of Japan
(Burckle, L. H., *et al.*) 6(2): 123-127

paleogeography—Mississippian
North America: Endemism and similarity indices; clues to the zoogeography of North American Mississippian corals
(Sando, W. J., *et al.*) 3(11): 661-664
Rocky Mountains: Diastem factor in Mississippian rocks of the northern Rocky Mountains
(Sando, W. J.) 3(11): 657-660

paleogeography—Ordovician
Arkansas: Shallow-marine origin for Ordovician rocks of the Ouachita Mountains, Arkansas
(Davies, D. K., *et al.*) 4(6): 340-344
Texas: Remnant mountains in Early Ordovician seas of the El Paso region, Texas and New Mexico
(Kottlowski, F. E., *et al.*) 1(3): 137-140

paleogeography—Paleozoic
Atlantic region: A precocious Atlantic reconstruction; an historical note
(Van Houten, F. B.) 3(4): 194-195
Nevada: Diagenetic dolomite formation related to Paleozoic paleogeography of the Cordilleran miogeocline in Nevada
(Dunham, J. B., *et al.*) 6(9): 556-559
— Early Paleozoic continental margin sedimentation, trilobite biofacies, and the thermocline, western United States
(Cook, H. E., *et al.*) 3(10): 559-562

paleogeography—Pleistocene
Atlantic Coastal Plain: Correlation of tectonically deformed shorelines on the southern Atlantic Coastal Plain
(Winker, C. D., *et al.*) 5(2): 123-127

paleogeography—Pliocene
Central America: Pliocene closing of the Isthmus of Panama, based on biostratigraphic evidence from nearby Pacific Ocean and Caribbean Sea cores
(Keigwin, L. D., Jr.) 6(10): 630-634

paleogeography—Tertiary
California: Possible strike-slip faulting in the southern California borderland
(Howell, D. G., *et al.*) 2(2): 93-98
— Possible strike-slip faulting in the southern California borderland; discussion and reply
(Cole, M. R., *et al.*) 3(1): 2-4

paleomagnetism—applications
magnetostratigraphy: Late Cenozoic magnetostratigraphy; comparisons with bio-, climato-, and lithozones
(Kukla, G., *et al.*) 3(12): 704-707

paleomagnetism—Cambrian
Wisconsin: Cambrian tropical storm waves in Wisconsin; discussions and reply
(Novak, I. D., *et al.*) 2(12): 572

paleomagnetism—Cretaceous
Honduras: Paleomagnetic results from Cretaceous sediments in Honduras; tectonic implications
(Wilson, H. H., *et al.*) 6(7): 440-447
Pacific Ocean: Late Cretaceous reversal sequence
(Keating, B., *et al.*) 3(2): 73-76

paleomagnetism—Eocene
Oregon: Paleomagnetic evidence for tectonic rotation of the Oregon Coast Range
(Simpson, R. W., *et al.*) 5(10): 585-589
Wyoming: Volcanism in the Rattlesnake Hills of central Wyoming; a paleomagnetic study
(Shive, P. N., *et al.*) 5(9): 563-566

paleomagnetism—experimental studies
remanent magnetization: Remanent magnetization of modern tidal flat sediments from San Francisco Bay, California
(Graham, S.) 2(5): 223-226
tektites: Natural remanent magnetism of tektites of the muong-nong type and its bearing on models of their origin
(de Gasparis, A. A., *et al.*) 3(10): 605-607

paleomagnetism—interpretation
time scales: Revised Cenozoic polarity time scale
(Tarling, D. H., *et al.*) 4(3): 133-136

paleomagnetism—Jurassic
Indian Ocean: Late Jurassic sea-floor spreading in the eastern Indian Ocean
(Larson, R. L.) 3(2): 69-71

paleomagnetism—methods
leaching: Observations on the chemical demagnetization of red beds
(Reeve, S. C.) 3(2): 90
mathematical methods: Rotations by spherical trigonometry
(Beck, M. E., Jr.) 4(4): 215-216
microscope methods: New combination of techniques for determination of the ultrafine structure of magnetic minerals
(Hoblitt, R. P., *et al.*) 3(12): 723-726
sun compass: A poorperson's sun compass
(Verosub, K. L.) 5(5): 319

paleomagnetism—Ordovician
New Jersey: Paleomagnetism of the Beemerville (New Jersey) alkaline complex
(Proko, M. S., *et al.*) 1(4): 185-186

paleomagnetism—Paleocene
New Mexico: A middle Paleocene paleomagnetic pole from the Nacimiento Formation, San Juan Basin, New Mexico
(Butler, R. F., *et al.*) 6(8): 495-498
— Biostratigraphy and magnetostratigraphy of Paleocene terrestrial deposits, San Juan Basin, New Mexico
(Lindsay, E. H., *et al.*) 6(7): 425-429

paleomagnetism—Phanerozoic
North America: A new technique for constructing apparent polar wander paths and the revised Phanerozoic path for North America
(Van Alstine, D. R., *et al.*) 6(3): 137-139
Northern Hemisphere: Reconsideration of paleomagnetic data in terms of wandering continents and a stable magnetic pole
(Cordell, L.) 2(7): 363

paleomagnetism—Pleistocene
California: Geomagnetic polarity event recorded at 1.1 m.y. on Cobb Mountain, Clear Lake volcanic field, California
(Mankinen, E. A., *et al.*) 6(11): 653-656

paleomagnetism—polar wandering
continental drift: Permian-Triassic continental configurations and the origin of the Gulf of Mexico
(Van der Voo, R., *et al.*) 4(3): 177-180

paleomagnetism—pole positions
continental drift: Paleomagnetic evidence for the location of Madagascar in Gondwanaland
(McElhinny, M. W., *et al.*) 4(8): 455-457
paleolatitude: Calculation of paleolatitudes from paleomagnetic poles
(Haile, N. S.) 3(4): 174

paleomagnetism—Proterozoic
Canada: Apparent polar wander paths and the joining of the Superior and Slave provinces during early Proterozoic time
(Roy, J. L., *et al.*) 6(3): 132-135
Canadian Shield: Apparent polar wander paths and the joining of the Superior and Slave provinces during early Proterozoic time
(Cavanaugh, M. D., *et al.*) 5(4): 207-211
— Paleomagnetism of the Gowganda and Chibougamau formations; evidence for 2,200-m.y.-old folding and remagnetization event of the Southern Province
(Morris, W. A.) 5(3): 137-140
Northwest Territories: Paleolatitude of glaciogenic upper Precambrian Rapitan Group and the use of tillites as chronostratigraphic marker horizons
(Morris, W. A.) 5(2): 85-88

— Paleolatitude of glaciogenic upper Precambrian Rapitan Group and the use of tillites as chronostratigraphic marker horizons; discussion and reply
(Williams, G. E., *et al.*) 6(1): 4-5
Ontario: Huronian glaciation and polar wander from the Gowganda Formation, Ontario
(Symons, D. T. A.) 3(6): 303-306

paleomagnetism—reversals
time scales: Revised magnetic polarity time scale for Late Cretaceous and Cenozoic time
(LaBrecque, J. L., *et al.*) 5(6): 330-335

paleomagnetism—Triassic
Utah: Magnetic polarity sequence of the Upper Triassic Kayenta Formation
(Steiner, M. B., *et al.*) 2(4): 191-194
— Reproducible anomalous Upper Triassic magnetization
(Steiner, M. B., *et al.*) 2(4): 195-198

paleontology—concepts
extinction: A reflection on genetic extinction, and the "killer clam"
(Bretsky, P. W.) 1(4): 157
— Genetic extinction hypothesis and its critics
(Levinton, J. S.) 1(4): 157-158
— On scientific hypotheses, killer clams, and extinction; discussion
(Valentine, J. W., *et al.*) 2(2): 69-71
— Why 'communities?; comment
(Boucot, A. J.) 2(4): 204

paleontology—evolution
phylogeny: Probabilistic models in evolutionary paleobiology; discussion
(Dowsett, F. R.) 5(11): 654

paleontology—history
collections: Horse genealogy; the Oregon connection
(Drake, E. T.) 6(10): 587-591

paleontology—life origin
interpretation: Microbiota from the Late Proterozoic Tindir Group, Alaska
(Allison, C. W., *et al.*) 1(2): 65-68
organic materials: "Humic" matter in the bitumen of ancient sediments: variations through geologic time; a new approach to the study of pre-Paleozoic (Precambrian) life
(Jackson, T. A.) 1(4): 163-166

paleontology—symposia
Vertebrata: Symposium; Vertebrate paleontology as a discipline in geochronology: I, II, III
(Savage, D. E., *et al.*) 2(2): 83-84

Paleozoic *see* Paleozoic *under* geochronology *under* New Mexico; Newfoundland; *see* Paleozoic *under* stratigraphy *under* Atlantic region; Massachusetts; Nevada

palynomorphs—biostratigraphy
reworking: Early Tertiary ages from the coastal belt of the Franciscan Complex, northern California
(Evitt, W. R., *et al.*) 3(8): 433-436

palynomorphs—Dinoflagellata
Jurassic: Foraminiferal affinities exhibited by the dinoflagellate Nannoceratopsis Deflandre; discussion
(Evitt, W. R.) 2(12): 582-583
— Foraminiferal affinities exhibited by the dinoflagellate Nannoceratopsis Deflandre; reply
(Haskell, T. R.) 3(8): 476
— Foraminiferal affinities exhibited by the dinoflagellate Nannoceratopsis Deflandre; with discussion
(Haskell, T. R.) 2(12): 579-582

palynomorphs—miospores
Cretaceous: Palynology, age, and correlation of the Wanship Formation and their implications for the tectonic history of northeastern Utah
(Nichols, D. J., *et al.*) 6(7): 430-433
— Upper Cretaceous arc-trench gap sedimentation on the Alaska Peninsula
(Mancini, E. A., *et al.*) 6(7): 437-439
Pleistocene: Interstadial mammoth remains and associated pollen and insect fossils, Kotzebue Sound area, northwestern Alaska
(Hopkins, D. M., *et al.*) 4(3): 169-172
Quaternary: A late Quaternary record of vegetation from Lake Annie, South-central Florida
(Watts, W. A.) 3(6): 344-346
— Quaternary glaciations and environments of northern Isla Chiloe, Chile
(Heusser, C. J., *et al.*) 5(5): 305-308

Papua New Guinea—geophysical surveys
surveys: Southeastern Papua; generation of thick crust in a tensional environment?
(Milsom, J., *et al.*) 3(3): 117-120

paragenesis—metamorphic rocks
Maine: Coexisting cordierite + biotite + chlorite from the Rumford Quadrangle, Maine
(Guidotti, C. V., *et al.*) 3(3): 147-148

Pelecypoda *see* Bivalvia *under* Mollusca

Pennsylvania—structural geology
foliation: Rotation and dewatering during slaty cleavage formation; some new evidence and interpretations
(Alterman, I. B.) 1(1): 33-36
fractures: Estimation of coal-cleat orientation using surface-joint and photolinear analysis
(Diamond, W. P., *et al.*) 3(12): 687-690
tectonics: Lat 40°N fault zone, Pennsylvania; a new interpretation
(Root, S. I., *et al.*) 5(12): 719-723

Permian *see also under* stratigraphy *under* Utah; Western Hemisphere

Permian—stratigraphy
continental drift: Permian-Triassic continental configurations and the origin of the Gulf of Mexico; discussion
(Holden, J. C.) 4(6): 324-325
paleoecology: Catastrophe theory; application to the Permian mass extinction
(Lantzy, R. J., *et al.*) 5(12): 724-728
— Catastrophe theory; application to the Permian mass extinction
(Borchardt, G., *et al.*) 6(8): 453-454
— Catastrophe theory; application to the Permian mass extinction
(Boucot, A. J., *et al.*) 6(11): 646-647

Persian Gulf—economic geology
petroleum: Subduction and oil migration
(Dickinson, W. R.) 2(9): 421-424

Peru—geochronology
Quaternary: Radiocarbon dating of the last glaciation in Peru
(Mercer, J. H., *et al.*) 5(10): 600-604

Peru—tectonophysics
plate tectonics: Spatial distribution of earthquakes and subduction of the Nazca Plate beneath South America
(Barazangi, M., *et al.*) 4(11): 686-692
— Spatial distribution of earthquakes and subduction of the Nazca Plate beneath South America; discussion
(Noble, D. C., *et al.*) 5(9): 576-578
— Subduction of the Nazca Plate beneath central Peru
(James, D. E.) 6(3): 174-178

petroleum *see also under* economic geology *under* Japan; Persian Gulf

petrology—classification
andesite: Andesite in oceanic regions
(Stewart, D. C., *et al.*) 3(10): 565-568
— Andesite in oceanic regions; discussion and reply
(Chayes, F., *et al.*) 4(1): 9-10
igneous rocks: IUGS classification of granitic rocks; a critique
(Lyons, P. C.) 4(7): 425-426
— IUGS classification of granitic rocks; a critique; discussion
(Brooks, E. R.) 5(11): 653-654
— IUGS classification of granitic rocks; a critique; discussion and reply
(Bateman, P. C.) 5(4): 252-255
tectonite: Tectonite and melange; a distinction
(Raymond, L. A.) 3(1): 7-9

— Tectonite and melange; a distinction; discussion and reply
(Beutner, E. C., *et al.*) 3(7): 358-359

petrology—methods
automatic data processing: A computer-assisted graphical method for identification and correlation of igneous rock chemistries
(Wright, T. L., *et al.*) 6(1): 16-20
xerography: Method for the reproduction of rock sections
(Babulski, D.) 3(1): 34

petrology—nomenclature
intrusions: Aeromagnetic discovery of a Baltimore gneiss dome in the piedmont of northwestern Delaware and southeastern Pennsylvania
(Higgins, M. W., *et al.*) 1(1): 41-43
— Mill Creek Dome revisited
(Higgins, M. W., *et al.*) 2(1): 28
— Spreading center terms and concepts; discussion and reply
(Kirkpatrick, S. R., *et al.*) 4(10): 631

Phanerozoic *see* Phanerozoic *under* stratigraphy *under* Ethiopia; North America

Phanerozoic—geochemistry
organic materials: "Humic" matter in the bitumen of ancient sediments: variations through geologic time; a new approach to the study of pre-Paleozoic (Precambrian) life
(Jackson, T. A.) 1(4): 163-166
sedimentary rocks: Secular trends in the composition of sedimentary rock assemblages; Archean through Phanerozoic time
(Schwab, F. L.) 6(9): 532-536

Phanerozoic—geochronology
time scales: A geological duration chart
(Braziunas, T. F.) 3(6): 342-343

Phanerozoic—stratigraphy
paleomagnetism: Calculation of paleolatitudes from paleomagnetic poles
(Haile, N. S.) 3(4): 174

Phanerozoic—tectonophysics
crust: Possible galactic causes for synchronous sedimentation sequences of the North American and eastern European cratons
(Steiner, J.) 1(2): 89-92
— Steiner's galacto-geologic correlations; discussion
(Johnson, J. G.) 2(1): 25

phase equilibria—concepts
review: Early theories and hypotheses on pressure-solution-redeposition
(Durney, D. W.) 6(6): 369-372

phase equilibria—experimental studies
CaO-MgO-SiO_2-CO_2: Peridotite, kimberlite, and carbonatite explained in the system CaO-MgO-SiO_2-CO_2
(Wyllie, P. J., *et al.*) 3(11): 621-624
CaO-MgO-SiO_2-CO_2-H_2O: Stability of dolomite in a hydrous mantle, with implications for the mantle solidus
(Eggler, D. H.) 6(7): 397-400

phase equilibria—magmas
experimental studies: Experimental demonstration of the existence of peridotitic liquids in earliest Archean magmatism
(Green, D. H., *et al.*) 3(1): 11-14
melting: Melting products of olivine tholeiite basalt in subduction zones
(Stern, C. R.) 2(5): 227-230

phase equilibria—melting
CO_2: Does CO_2 cause partial melting in the low-velocity layer of the mantle?
(Eggler, D. H.) 4(2): 69-72
— High CO_2 solubilities in mantle magmas
(Wyllie, P. J., *et al.*) 4(1): 21-24
— High CO_2 solubilities in mantle magmas; discussion and reply
(Eggler, D. H., *et al.*) 4(4): 198-200
partial melting: Experimental generation of cordierite- or garnet-bearing granitic liquids from a pelitic composition
(Green, T. H.) 4(2): 85-88

Philippine Islands—tectonophysics
plate tectonics: Philippine arc system; collision or flipped subduction zones?
(Roeder, D.) 5(4): 203-206

Pisces—Osteichthyes
Eocene: Fossil catfish and the depositional environment of the Green River Formation, Wyoming
(Buchheim, H. P., *et al.*) 5(4): 196-198

placers—diamonds
Guyana: Possible origin of diamonds in the Guiana Shield; comment
(Schonberger, H., *et al.*) 2(10): 474-475
— Proposed origin for Guianian diamonds
(Reid, A. R.) 2(2): 67-68
— Proposed origin for Guianian diamonds; comment
(Hastings, D. A.) 2(10): 475-476
— Proposed origin for Guianian diamonds; reply
(Reid, A. R.) 2(10): 476

planetology *see also* Mars; Moon

planetology—concepts
energy: Possible galactic causes for geologic events; comment
(Visser, J. N. J.) 2(6): 279
— Possible galactic causes for geologic events; discussion and reply
(Bond, H. E., *et al.*) 2(6): 279-280
— Possible galactic causes for synchronous sedimentation sequences of the North American and eastern European cratons
(Steiner, J.) 1(2): 89-92
— Steiner's galacto-geologic correlations; discussion
(Johnson, J. G.) 2(1): 25

Plantae *see also* algae; bacteria; ichnofossils; palynomorphs; problematic fossils; Protista

Plantae—paleoecology
terrestrial environment: The advent of land plant life
(Gray, J., *et al.*) 6(8): 489-492

plasticity *see under* experimental studies *under* deformation

plate tectonics *see also under* tectonophysics *under* Africa; Alaska; Alps; Andes; Antarctica; Appalachians; Arctic region; Arkansas; Asia; Atlantic Ocean; Atlantic region; Australia; Basin and Range Province; British Columbia; California; Canada; Canadian Shield; Caribbean region; Central America; English Channel; Ethiopia; Eurasia; Europe; Far East; Fiji; France; Great Plains; Greece; Greenland; Guatemala; Gulf of California; Hawaii; Indian Ocean; Indonesia; Iran; Kenya; Malay Archipelago; Mediterranean region; Mexico; Morocco; New Mexico; Newfoundland; North America; Northern Hemisphere; Oklahoma; Oman; Pacific Coast; Pacific Ocean; Pacific region; Pakistan; Paleogene; Peru; Philippine Islands; Red Sea region; Society Islands; South America; Southwestern U.S.; symposia; Tertiary; Western Australia; Western Interior; Western U.S.; Wyoming

plate tectonics—age
Archean: Genesis of Archean peridotitic magmas and constraints on Archean geothermal gradients and tectonics
(Green, D. H.) 3(1): 15-18
Precambrian: Paired metamorphic belts in Precambrian granulite rocks in Gondwanaland
(Katz, M. B.) 2(5): 237-241

plate tectonics—concepts
collision: Hot spots and continental break-up; implications for collisional orogeny
(Dewey, J. F., *et al.*) 2(2): 57-60
crust: Plate tectonics and the problem of two much granitic basement
(Elliott, D.) 1(3): 111
evaluation: Acceptance of plate tectonic theory by geologists
(Nitecki, M. H., *et al.*) 6(11): 661-664
history: Comment on "Tectonics of Asia, by E. Argand"
(Scholten, R.) 6(10): 585-586
orogenic belts: Ancient southern margin of North America; discussion and reply
(Belderson, R. H., *et al.*) 4(4): 196-197
sedimentation: Modern and ancient sedimentary basins; comparative accumulation rates
(Schwab, F. L.) 4(12): 723-727
spreading centers: Spreading center terms and concepts
(Luyendyk, B. P., *et al.*) 4(6): 369-370

plate tectonics—evolution
continental margin: Framework mineralogy and chemical composition of continental margin-type sandstone
(Schwab, F. L.) 3(9): 487-490
trenches: Development of sedimentary basins on the lower trench slope
(Moore, G. F., *et al.*) 4(11): 693-697
plate tectonics—geometry
mid-ocean ridges: Meridional pattern of the oceanic rift system
(Lutz, T. M., *et al.*) 6(3): 179-183
plate tectonics—indicators
weathering: Progressive weathering of submarine basalt with age; further evidence of sea-floor spreading
(Salisbury, M. H., *et al.*) 1(2): 63-64
plate tectonics—island arcs
geochemistry: Potash-depth (K-h) relations in continental margin and intra-oceanic magmatic arcs
(Dickinson, W. R.) 3(2): 53-56
geometry: Geometry and lateral strain of subducted plates in island arcs
(Laravie, J. A.) 3(9): 484-486
plate tectonics—mechanism
concepts: Plate tectonics; a plastic as opposed to a rigid body model
(Roper, P. J.) 2(5): 247-250
dynamics: Westward tidal lag as the driving force of plate tectonics
(Moore, G. W.) 1(3): 99-100
— Westward tidal lag; comment
(Howell, B. F., Jr.) 2(1): 28
intraplate tectonics: Stresses induced by the addition or removal of overburden and associated thermal effects
(Haxby, W. F., *et al.*) 4(3): 181-184
plate tectonics—movement
fold belts: Plate tectonics of marginal foreland thrust-fold belts
(Coney, P. J.) 1(3): 131-134
fracture zones: Displacement history of oceanic fracture zones
(DeLong, S. E., *et al.*) 5(4): 199-202
models: An alternative model for early Tertiary absolute plate motions
(Jurdy, D. M.) 6(8): 469-472
rotation: Rotations by spherical trigonometry
(Beck, M. E., Jr.) 4(4): 215-216
Wilson Cycle: Penrose Conference report; pre-Mesozoic plate tectonics; how far back in Earth history can the Wilson Cycle be extended?
(Dewey, J. F., *et al.*) 3(8): 422-424
plate tectonics—processes
steady-state processes: Steady-state trenches?
(Helwig, J., *et al.*) 2(7): 309-316
— Steady-state trenches?; discussion and reply
(Moore, G. F., *et al.*) 3(4): 221-223
plate tectonics—rifting
periodicity: Widespread continental rifting; some considerations of timing and mechanism
(Sawkins, F. J.) 4(7): 427-430
symposia: Penrose Conference report; Paleozoic margins of paleo-American and paleo-Eurafrican plates; drifting or rifting
(Skehan, J. W., *et al.*) 4(3): 185-186
plate tectonics—subduction
concepts: Selective subduction
(Moore, J. C.) 3(9): 530-532
mobile belts: Pangeaic orogenic system
(Hurley, P. M.) 2(8): 373-376
processes: Origin of continental crust
(Ashgirei, G. D.) 2(8): 401-404
rates: An expanding Earth on the basis of sea-floor spreading and subduction rates
(Steiner, J.) 5(5): 313-318
— An expanding Earth on the basis of sea-floor spreading and subduction rates
(Faul, H., *et al.*) 6(6): 377-383
subduction zones: Melting products of olivine tholeiite basalt in subduction zones
(Stern, C. R.) 2(5): 227-230

Pleistocene *see also under* geochronology *under* Alaska; Andes; California; Mexico; North America; Northwest Territories; *see also under* stratigraphy *under* Alaska; Antarctic Ocean; Atlantic Coastal Plain; Atlantic Ocean; Barbados; Florida; Illinois; Pacific Ocean; Washington; Wisconsin
Pleistocene—geochronology
symposia: Penrose Conference report; Pliocene and Pleistocene geochronology
(Damon, P. E., *et al.*) 4(10): 591-593
Pleistocene—stratigraphy
boundary: Status of late Cenozoic boundaries
(Van Couvering, J. A.) 6(3): 169
changes of level: Deep eustatic terrace levels; further speculations
(Pratt, R. M., *et al.*) 2(3): 155-159
paleoecology: Pleistocene plagues?
(Spirakis, C. S.) 3(7): 372
Pliocene *see also under* geochronology *under* symposia; *see* Pliocene *under* stratigraphy *under* Antarctic Ocean; Caribbean Sea; Pacific Ocean
Pliocene—geochronology
symposia: Penrose Conference report; Pliocene and Pleistocene geochronology
(Damon, P. E., *et al.*) 4(10): 591-593
Pliocene—stratigraphy
boundary: Status of late Cenozoic boundaries
(Van Couvering, J. A.) 6(3): 169
plutons *see under* intrusions
pollution *see also under* environmental geology *under* Gulf of Mexico
Polynesia *see also* Society Islands; Tahiti; Tonga
Polynesia—tectonophysics
mantle: Sr-isotopic evidence for an old mantle source region for French Polynesian volcanism
(Duncan, R. A., *et al.*) 4(12): 728-732
potassium—abundance
plutonic rocks: Plutonic zones in the Peninsular Ranges of southern California and northern Baja California; discussion and reply
(Baird, A. K., *et al.*) 3(12): 676-677
volcanic rocks: Indonesian active volcanic arc; K, Sr, and Rb variation with depth to the Benioff zone
(Hutchison, C. S.) 4(7): 407-408
— Relationship between depth to Benioff zone and K and Sr concentrations in volcanic rocks of Chile
(Palacios M., C., *et al.*) 3(10): 595-596
potassium—geochemistry
magmas: Migration of hydrous fluids in the upper mantle and potassium variation in calc-alkalic rocks
(Best, M. G.) 3(8): 429-432
plutonic rocks: Chemical trends across Cretaceous batholithic rocks of southern California
(Baird, A. K., *et al.*) 2(10): 493-495
Precambrian *see also under* geochronology *under* Missouri; New Mexico; Niger
Precambrian—geochemistry
organic materials: "Humic" matter in the bitumen of ancient sediments: variations through geologic time; a new approach to the study of pre-Paleozoic (Precambrian) life
(Jackson, T. A.) 1(4): 163-166
sedimentary rocks: Secular trends in the composition of sedimentary rock assemblages; Archean through Phanerozoic time
(Schwab, F. L.) 6(9): 532-536
Precambrian—tectonophysics
mantle: Evolution of the mantle; geochemical evidence from alkali basalt
(Sun, S. S., *et al.*) 3(6): 297-302
problematic fossils—occurrence
assemblages: Late Proterozoic microbiota of the Miette Group, southern British Columbia
(Javor, B. J., *et al.*) 4(2): 111-119
possibilities: Microbiota from the Late Proterozoic Tindir Group, Alaska
(Allison, C. W., *et al.*) 1(2): 65-68
— Pyrite framboid; animal, vegetable, or mineral?; discussion
(Kalliokoski, J.) 2(1): 26-27

— Pyritized microfossils and pyrite framboids; reply
(Allison, C. W., *et al.*) 2(4): 202-203

problematic fossils—paleoecology
paleoclimatology: Pleistocene plagues?
(Spirakis, C. S.) 3(7): 372

problematic fossils—taxonomy
identification: Pseudofossils; a plea for caution
(Cloud, P.) 1(3): 123-127
— Pseudofossils; a plea for caution; comment
(Stinchcomb, B. L.) 2(1): 25

Proterozoic *see also under* geochronology *under* Ireland; *see also under* stratigraphy *under* British Columbia; Canada; Ethiopia; North America; Northwest Territories; Ontario; South Africa

Protista—Silicoflagellata
Cretaceous: Late Mesozoic and early Cenozoic sediment cores from the Arctic Ocean
(Clark, D. L.) 2(1): 41-44
Pliocene: Early Pliocene temperature changes in the Antarctic seas
(Ciesielski, P. F., *et al.*) 2(10): 511-515

Protozoa *see* Protista

Puerto Rico—engineering geology
slope stability: Slow movement of earth under tropical rain forest conditions
(Lewis, L. A.) 2(1): 9-10

Puerto Rico—geomorphology
mass movements: Slow movement of earth under tropical rain forest conditions
(Lewis, L. A.) 2(1): 9-10

pumice *see also under* pyroclastics and **glasses** *under* igneous rocks

quartz *see* quartz *under* experimental studies *under* geophysics; *see* quartz *under* framework silicates *under* crystal growth; minerals; *see* quartz *under* framework silicates, silica minerals *under* crystal growth; minerals

Quaternary *see* Quaternary *under* geochronology *under* Antarctica; Arctic region; California; Great Plains; Kansas; Peru; *see* Quaternary *under* stratigraphy *under* Alaska; Arctic Ocean; Chile; Eastern U.S.; Florida; Gulf of Mexico; New Zealand; Northern Territory; Queensland; symposia

Quaternary—stratigraphy
biostratigraphy: Global synchroneity of late Quaternary coccolith datum levels; validation by oxygen isotopes
(Thierstein, H. R., *et al.*) 5(7): 400-404
— Globally synchronous extinction of the radiolarian Stylatractus universus
(Hays, J. D., *et al.*) 4(11): 649-652
changes of level: Eustatic amplitude variations and world glacial changes
(Morner, N. A.) 3(3): 109-110

Quebec—stratigraphy
changes of level: Isostasy and eustasy of Hudson Bay
(Hillaire-Marcel, C., *et al.*) 6(2): 117-122

Quebec—structural geology
tectonics: Gravity anomalies and deep structure of the Cape Smith Foldbelt, northern Ungava, Quebec
(Thomas, M. D., *et al.*) 5(3): 169-172
— Gravity anomalies and deep structure of the Cape Smith Foldbelt, northern Ungava, Quebec; discussion and reply
(Baer, A. J., *et al.*) 5(11): 651-653

Queensland—oceanography
sediments: Radial aragonite ooids, Lizard Island, Greater Barrier Reef, Queensland, Australia
(Davies, P. J., *et al.*) 4(2): 120-122

Queensland—stratigraphy
Quaternary: Late Quaternary sea-level changes, Gulf of Carpentaria, Australia
(Smart, J.) 5(12): 755-759

radioactive dating *see* absolute age

Radiolaria—biostratigraphy
chert: Age and geologic significance of radiolarian cherts in the California Coast Ranges
(Pessagno, E. A., Jr.) 1(4): 153-156
extinction: Extension of the radiolarian Stylatractus universus as a biostratigraphic datum to the Atlantic Ocean
(Morley, J. J., *et al.*) 6(5): 309-311
Jurassic: Significance of Mesozoic radiolarians from the pre-Nevadan rocks of the southern Klamath Mountains, California
(Irwin, W. P., *et al.*) 5(9): 557-562
range: Globally synchronous extinction of the radiolarian Stylatractus universus
(Hays, J. D., *et al.*) 4(11): 649-652
zoning: Cenozoic magnetic time scale in deep-sea cores; completion of the Neogene
(Theyer, F., *et al.*) 2(10): 487-492

Radiolaria—evolution
biochemistry: Silica, diatoms, and Cenozoic radiolarian evolution
(Harper, H. E., Jr., *et al.*) 3(4): 175-177

rare earths *see also* europium

rare earths—abundance
plutonic rocks: Fractionation of rare-earth elements in the Tuolumne Intrusive Series, Sierra Nevada Batholith, California
(Frey, F. A., *et al.*) 6(4): 239-242

rare earths—geochemistry
magmas: Rare-earth partitioning between hornblende and dacitic liquid and implications for the genesis of trondhjemitic-tonalitic magmas
(Arth, J. G., *et al.*) 4(9): 534-536
trace elements: Geochemical regularities and genetic significance of ophiolitic basalts
(Sun, S. S., *et al.*) 6(11): 689-693

reclamation *see also under* environmental geology *under* Ohio

Red Sea—geochemistry
isotopes: Strontium-isotope stratigraphy of a Red Sea core
(Boger, P. D., *et al.*) 2(4): 181-183

Red Sea region—tectonophysics
plate tectonics: Interpretation of the stratigraphy of northern Ethiopia according to the model of plate tectonics
(Beyth, M.) 1(2): 81-82

reefs *see also under* oceanography *under* Atlantic Ocean; Belize; *see* reefs *under* sedimentary petrology *under* Bahamas; Florida; Mexico; Northwest Territories

reefs—ecology
corals: Basis for skeletal plasticity among reef-building corals
(Weber, J. N.) 2(3): 153-154

regional geology *see* areal geology

remote sensing *see also* geophysical methods; *see* remote sensing *under* geophysical surveys *under* automatic data processing; California: Guatemala; Louisiana; Nevada

remote sensing—automatic data processing
color imagery: Simulated "true color" images from ERTS data
(Eliason, E. M., *et al.*) 2(5): 231-234
— Simulated "true color" images from ERTS data; comment
(Sales, J. K.) 2(10): 496

Rhode Island—engineering geology
nuclear facilities: Environmental and structural implications of Rhode Island seismic events, 1965-1976
(Fisher, J. J.) 6(4): 251-255

Rhode Island—environmental geology
geologic hazards: Environmental and structural implications of Rhode Island seismic events, 1965-1976
(Fisher, J. J.) 6(4): 251-255

Rhode Island—geophysical surveys
seismic surveys: Freshwater-lake sediments beneath Block Island Sound
(Bertoni, R., *et al.*) 5(10): 631-635

Rhode Island—seismology
earthquakes: Environmental and structural implications of Rhode Island seismic events, 1965-1976
(Fisher, J. J.) 6(4): 251-255

Rhode Island—stratigraphy
Cambrian: Significance of fossiliferous Middle Cambrian rocks of Rhode Island to the history of the Avalonian microcontinent
(Skehan, J. W., *et al.*) 6(11): 694-698

Rhodesia—geochronology
Archean: Isotopic evidence for crustal reworking in the Rhodesian Archean craton, southern Africa
(Hickman, M. H.) 6(4): 214-216
rhyolite *see* rhyolite *under* andesite-rhyolite family *under* igneous rocks
rift zones *see* rift zones *under* systems *under* faults
ripple marks *see under* bedding plane irregularities *under* sedimentary structures
rock mechanics—deformation
massifs: Finite-element model of a mountain massif
(Sturgul, J. R., *et al.*) 4(7): 439-442
— Finite-element model of a mountain massif; discussion and reply
(Goguel, J., *et al.*) 5(5): 260-261
rock mechanics—materials, properties
sandstone: Reduction of porosity by pressure solution; experimental verification
(Sprunt, E. S., *et al.*) 4(8): 463-466
Rocky Mountains—engineering geology
geologic hazards: Dynamics of dense-snow avalanches interpreted from broken trees
(Mears, A. I.) 3(9): 521-523
slope stability: Earthquake hazards in sensitive clays along the central Wasatch Front, Utah
(Parry, W. T.) 2(11): 559-560
Rocky Mountains—environmental geology
geologic hazards: Impact of clear-cutting and road construction on soil erosion by landslides in the western Cascade Range, Oregon
(Swanson, F. J., *et al.*) 3(7): 393-396
Rocky Mountains—seismology
crust: Nature of the Wind River thrust, Wyoming, from COCORP deep-reflection data and from gravity data
(Smithson, S. B., *et al.*) 6(11): 648-652
Rocky Mountains—stratigraphy
Mississippian: Diastem factor in Mississippian rocks of the northern Rocky Mountains
(Sando, W. J.) 3(11): 657-660
Rocky Mountains—structural geology
tectonics: Boulder Batholith; a result of emplacement of a block detached from the Idaho batholith infrastructure?
(Hyndman, D. W., *et al.*) 3(7): 401-404
— Plate tectonics and foreland basement deformation
(Lowell, J. D.) 2(6): 275-278
— Plate tectonics and foreland basement deformation; discussion and reply
(Woodward, L. A., *et al.*) 2(12): 570-571
— Radiometric dating of time of thrusting in the disturbed belt of Montana
(Hoffman, J., *et al.*) 4(1): 16-20
— Rate of crustal extension across the Rio Grande Rift near Albuquerque, New Mexico
(Woodward, L. A.) 5(5): 269-272
Rocky Mountains—tectonophysics
heat flow: Yellowstone Hot Spot; new magnetic and seismic evidence
(Smith, R. B., *et al.*) 2(9): 451-455
Romania—structural geology
tectonics: Geology of Romania; abstr.
(Burchfiel, B. C., *et al.*) 2(8): 392-393
rubidium—abundance
volcanic rocks: Indonesian active volcanic arc; K, Sr, and Rb variation with depth to the Benioff zone
(Hutchison, C. S.) 4(7): 407-408
Russia *see* USSR
salt tectonics *see also under* structural geology *under* Mediterranean region; Mediterranean Sea
sandstone *see also under* clastic rocks *under* sedimentary rocks
Scandinavia—structural geology
isostasy: Faulting, fracturing, and seismicity as functions of glacio-isostasy in Fennoscandia
(Moerner, N. A.) 6(1): 41-45
neotectonics: Faulting, fracturing, and seismicity as functions of glacio-isostasy in Fennoscandia
(Moerner, N. A.) 6(1): 41-45
Scotland—petrology
metamorphic rocks: Are pseudotachylites products of fracture or fusion?
(Wenk, H. R.) 6(8): 507-511
sea-floor spreading *see also under* tectonophysics *under* Arabian Peninsula; Arctic Ocean; Atlantic Ocean; Caribbean Sea; Florida; Indian Ocean; Pacific Ocean
sea-floor spreading—causes
concepts: Relation in time between eustacy and orogeny; a presently indeterminate problem; reply
(Rona, P. A.) 2(4): 201-202
— Sea-floor spreading and orogeny; correlation or anticorrelation?; discussion
(Johnson, J. G.) 2(4): 199-201
sea-floor spreading—concepts
heat flow: Heat loss from the Earth; new estimate
(Williams, D. L., *et al.*) 2(7): 327-328
sea-floor spreading—mechanism
concepts: Westward tidal lag as the driving force of plate tectonics
(Moore, G. W.) 1(3): 99-100
— Westward tidal lag; comment
(Howell, B. F., Jr.) 2(1): 28
sea-floor spreading—rates
concepts: An expanding Earth on the basis of sea-floor spreading and subduction rates
(Faul, H., *et al.*) 6(6): 377-383
evolution: An expanding Earth on the basis of sea-floor spreading and subduction rates
(Steiner, J.) 5(5): 313-318
indicators: Progressive weathering of submarine basalt with age; further evidence of sea-floor spreading
(Salisbury, M. H., *et al.*) 1(2): 63-64
interpretation: Dilemma of a Cretaceous time scale and rates of sea-floor spreading
(Baldwin, B., *et al.*) 2(6): 267-270
Sea of Japan *see* Japan Sea
Sea of Okhotsk *see* Okhotsk Sea
sea water—composition
suspended materials: Suspended-matter distribution in the New York Bight apex related to Hurricane Belle
(Young, R. A.) 6(5): 301-304
sea water—experimental studies
carbonate compensation depth: Dissolution of aragonite, Mg-calcite, and calcite in the North Atlantic Ocean
(Milliman, J. D.) 3(8): 461-462
sea water—geochemistry
magnesium: Magnesium metasomatism during hydrothermal alteration of new oceanic crust
(Bloch, S., *et al.*) 6(5): 275-277
sedimentary petrology—classification
clastic rocks: Laboratory classification of very fine grained sedimentary rocks
(Lewan, M. D.) 6(12): 745-748
cross-stratification: Descriptive classification of cross-stratification; with discussion
(Jacob, A. F.) 1(3): 103-106
— Response to Michael T. Roberts and D. R. Spearing; reply
(Jacob, A. F.) 2(2): 69
grain size: No real advantage; discussion
(Hails, J. R., *et al.*) 2(2): 71
— Proposal for a particle-size grade scale based on 10; with discussion
(Shea, J. H.) 1(1): 3-8
sedimentary petrology—methods
xerography: Method for the reproduction of rock sections
(Babulski, D.) 3(1): 34

sedimentary petrology—symposia
diagenesis: Penrose Conference report; Water and carbonate rocks
(Freeman, T. (convener), *et al.*) 2(4): 179-180
sedimentary petrology—techniques
comparison: Comparison between sieving and settling-tube determinations of sand sizes by using discriminant analysis
(Jones, J. R., *et al.*) 4(12): 741-744
— Comparison between sieving and settling-tube determinations of sand sizes by using discriminant analysis; discussion
(Fisher, J. J.) 5(5): 264
sedimentary rocks *see also* sedimentary structures; sedimentation; sediments
sedimentary rocks—carbonate rocks
calcarenite: Influence of climate on the early diagenesis of carbonate eolianites
(Ward, W. C.) 1(4): 171-174
dolostone: Calcitization of Edwards Group dolomites in the Balcones fault zone aquifer, South-central Texas
(Abbott, P. L.) 2(7): 359-362
— Diagenetic dolomite formation related to Paleozoic paleogeography of the Cordilleran miogeocline in Nevada
(Dunham, J. B., *et al.*) 6(9): 556-559
environmental analysis: Sodium; paleosalinity indicator in ancient carbonate rocks
(Veizer, J., *et al.*) 5(3): 177-179
limestone: Carbon isotopes and limestone cement
(Hudson, J. D.) 3(1): 19-22
— Classification of solution cleavage in pelagic limestones
(Alvarez, W., *et al.*) 6(5): 263-266
— Early Paleozoic continental margin sedimentation, trilobite biofacies, and the thermocline, western United States
(Cook, H. E., *et al.*) 3(10): 559-562
— Franciscan limestones and their environments of deposition
(Wachs, D., *et al.*) 3(1): 29-33
— Franciscan limestones and their environments of deposition; discussion and reply
(Raymond, L. A., *et al.*) 3(6): 294-296
— Limestone compaction; an enigma
(Shinn, E. A., *et al.*) 5(1): 21-24
— Previously undescribed carbonate deposits on Key Largo, Florida
(Bain, R. J., *et al.*) 3(3): 137-139
— Previously undescribed carbonate deposits on Key Largo, Florida; discussion
(Steinker, D. C., *et al.*) 3(7): 360
— Sedimentary fabrics and their relation to strain-analysis methods
(Boulter, C. A.) 4(3): 141-146
— Summary of Silurian and Lower Devonian basin and basin-slope limestones, Copenhagen Canyon, Nevada
(Matti, J. C., *et al.*) 2(12): 575-577
lithofacies: Late Ordovician-Early Silurian glaciation and the Ordovician-Silurian boundary in the northern Canadian Cordillera
(Lenz, A. C.) 4(5): 313-317
micrite: Limestone compaction; an enigma
(Chanda, S. K., *et al.*) 6(4): 198-199
petrography: Former magnesian calcite and aragonite submarine cements in upper Paleozoic reefs of the Canadian Arctic; a summary
(Davies, G. R.) 5(1): 11-15
sedimentary rocks—chemically precipitated rocks
chert: Age and geologic significance of radiolarian cherts in the California Coast Ranges
(Pessagno, E. A., Jr.) 1(4): 153-156
evaporites: Atlantic evaporites formed by evaporation of water spilled from Pacific, Tethyan, and Southern oceans
(Burke, K.) 3(11): 613-616
— Sedimentological significance of nodular and laminated anhydrite
(Dean, W. E., *et al.*) 3(7): 367-372
— Subaqueous evaporites of the Carboniferous Otto Fiord Formation, Canadian Arctic Archipelago; a summary
(Davies, G. R., *et al.*) 3(5): 273-278
gypsum: The salt that was
(Schreiber, B. C., *et al.*) 5(9): 527-528
halite: Bromine content of Mediterranean halite
(Kuhn, R., *et al.*) 2(5): 213-216
— Bromine content of Mediterranean halite; discussion and reply
(Kendall, A. C., *et al.*) 2(11): 524-526
sedimentary rocks—clastic rocks
classification: Laboratory classification of very fine grained sedimentary rocks
(Lewan, M. D.) 6(12): 745-748
conglomerate: Cambrian tropical storm waves in Wisconsin
(Dott, R. H., Jr.) 2(5): 243-246
— Large-scale traction-produced structures in deep-water fan-channel conglomerates in southern Chile
(Winn, R. D., Jr., *et al.*) 5(1): 41-44
environmental analysis: Possible strike-slip faulting in the southern California borderland
(Howell, D. G., *et al.*) 2(2): 93-98
— Shallow-marine origin for Ordovician rocks of the Ouachita Mountains, Arkansas
(Davies, D. K., *et al.*) 4(6): 340-344
flysch: Sheeted dikes, gabbro, and pillow basalt in flysch of coastal southern Alaska
(Tysdal, R. G., *et al.*) 5(6): 377-383
lithofacies: Upper Cretaceous arc-trench gap sedimentation on the Alaska Peninsula
(Mancini, E. A., *et al.*) 6(7): 437-439
red beds: Observations on the chemical demagnetization of red beds
(Reeve, S. C.) 3(2): 90
— Paleosol caliche in the New Haven Arkose, Connecticut; record of semiaridity in Late Triassic-Early Jurassic time
(Hubert, J. F.) 5(5): 302-304
sandstone: Reduction of porosity by pressure solution; experimental verification
(Sprunt, E. S., *et al.*) 4(8): 463-466
— Relationships of till to bed rock in the Lake Superior region
(Dell, C. I.) 3(10): 563-564
shale: Fossil catfish and the depositional environment of the Green River Formation, Wyoming
(Buchheim, H. P., *et al.*) 5(4): 196-198
— Green River Formation of Utah and Colorado and playa-lake deposition; discussion
(Moussa, M. T.) 4(6): 326, 382
tillite: Paleolatitude of glaciogenic upper Precambrian Rapitan Group and the use of tillites as chronostratigraphic marker horizons
(Morris, W. A.) 5(2): 85-88
— Quartz sand surface textural evidence for a glacial origin of the Squantum "tillite," Boston Basin, Massachusetts
(Rehmer, J. A., *et al.*) 2(8): 413-415
— Quartz sand surface textural evidence for a glacial origin of the Squantum "Tillite," Boston Basin, Massachusetts; discussions and reply
(Stuart, C. J., *et al.*) 3(3): 153-155
turbidite: Paleocurrents in part of the Franciscan Complex, California
(Telleen, K. E.) 5(1): 49-51
sedimentary rocks—composition
chemical composition: Secular trends in the composition of sedimentary rock assemblages; Archean through Phanerozoic time
(Schwab, F. L.) 6(9): 532-536
organic materials: "Humic" matter in the bitumen of ancient sediments: variations through geologic time; a new approach to the study of pre-Paleozoic (Precambrian) life
(Jackson, T. A.) 1(4): 163-166
sedimentary rocks—environmental analysis
lakes: Origin and configuration of the oxidized zone in Tertiary formations, Death Valley region, California
(Wilson, J. L., *et al.*) 5(11): 696-698
marine environment: Paleoceanography of the Mesozoic Alpine Tethys; summary
(Hsu, K. J.) 3(6): 347-348

sedimentary rocks—lithofacies
environmental analysis: Pelagic limestone and radiolarite of the Tethyan Mesozoic: a genetic model
(Bosellini, A., *et al.*) 3(5): 279-282
— Playa-lake deposition; Green River Formation, Piceance Creek basin, Colorado
(Lundell, L. L., *et al.*) 3(9): 493-497
sedimentary rocks—lithostratigraphy
correlation: Correlation between Cambrian rocks of the southern Appalachian Geosyncline and the interior low plateaus
(Kidd, J. T., *et al.*) 4(12): 767-769
— Paleomagnetic results from Cretaceous sediments in Honduras; tectonic implications
(Wilson, H. H., *et al.*) 6(7): 440-447
Proterozoic: Mackenzie tectonic arc; reflection of early basin configuration?
(Aitken, J. D., *et al.*) 6(10): 626-629
sedimentary rocks—organic residues
saprolite: Fossil laterite on bedrock in Brooklyn, New York
(Blank, H. R.) 6(1): 21-24
sedimentary rocks—properties
physical properties: Selective subduction
(Moore, J. C.) 3(9): 530-532
sedimentary rocks—provenance
mountains: Remnant mountains in Early Ordovician seas of the El Paso region, Texas and New Mexico
(Kottlowski, F. E., *et al.*) 1(3): 137-140
sedimentary rocks—textures
grain size: Proposal for a particle-size grade scale based on 10; with discussion
(Shea, J. H.) 1(1): 3-8
sedimentary structures *see also* sedimentary rocks; sediments
sedimentary structures—bedding plane irregularities
ripple marks: Possible rip current origin for bottom ripple zones to 30-m depth
(Reimnitz, E., *et al.*) 4(7): 395-400
sand waves: Analysis of microtextures on quartz sand grains from lower Cook Inlet, Alaska
(Hampton, M. A., *et al.*) 6(2): 105-110
— Effects of varying discharge regimes on bed-form sedimentary structures in modern rivers
(Jones, C. M.) 5(9): 567-570
— Sand-wave fields in Taiwan Strait
(Boggs, S., Jr.) 2(5): 251-253
sedimentary structures—environmental analysis
anaerobic environment: Bioturbation and the origin of the metazoans; evidence from the Belt Supergroup, Montana
(Byers, C. W.) 4(9): 565-567
lakes: Green River Formation of Utah and Colorado and playa-lake deposition; discussion
(Moussa, M. T.) 4(6): 326, 382
— Playa-lake deposition; Green River Formation, Piceance Creek basin, Colorado
(Lundell, L. L., *et al.*) 3(9): 493-497
marine environment: Sedimentological significance of nodular and laminated anhydrite
(Dean, W. E., *et al.*) 3(7): 367-372
submarine fans: Large-scale traction-produced structures in deep-water fan-channel conglomerates in southern Chile
(Winn, R. D., Jr., *et al.*) 5(1): 41-44
— Paleocurrents in part of the Franciscan Complex, California
(Telleen, K. E.) 5(1): 49-51
turbidity currents: Resedimented pelagic carbonate and volcaniclastic sediments and sedimentary structures in Leg 30 DSDP cores from the western equatorial Pacific
(Klein, G. deV.) 3(1): 39-42
sedimentary structures—genesis
experimental studies: Structures generated in fluid stressing of freshly deposited clays resemble ichnofossils
(Karcz, I., *et al.*) 2(6): 289-290
lithoherms: Lithoherms in the Straits of Florida
(Neumann, A. C., *et al.*) 5(1): 4-10
— Lithoherms in the Straits of Florida; discussion and reply
(De Keyser, T. L., *et al.*) 6(1): 5-8
sedimentary structures—interpretation
inverse grading: Inverse grading as stratigraphic evidence of large floods; discussion and reply
(Fisk, L. H., *et al.*) 2(12): 613-615
volcanic ash: Tragic base surge in 1790 at Kilauea volcano
(Swanson, D. A., *et al.*) 1(2): 83-86
sedimentary structures—planar bedding structures
cross-bedding: Cross-bed variability in a single sand body; discussion and reply
(Miall, A. D., *et al.*) 4(10): 635-636
cross-stratification: Descriptive classification of cross-stratification; with discussion
(Jacob, A. F.) 1(3): 103-106
— Response to Michael T. Roberts and D. R. Spearing; reply
(Jacob, A. F.) 2(2): 69
rhythmic bedding: Age and geologic significance of radiolarian cherts in the California Coast Ranges
(Pessagno, E. A., Jr.) 1(4): 153-156
varves: Grain-size distribution within glacial varves
(Peach, P. A., *et al.*) 3(1): 43-46
sedimentary structures—secondary structures
solution cleavage: Classification of solution cleavage in pelagic limestones
(Alvarez, W., *et al.*) 6(5): 263-266
sedimentary structures—soft sediment deformation
boudinage: Deformation by soft-sediment extension in the Coastal Belt, Franciscan Complex
(Kleist, J. R.) 2(10): 501-504
olistostromes: Middle to Late Cretaceous sedimentary melange, Franciscan Complex, northern California
(Gucwa, P. R.) 3(3): 105-108
sedimentation—controls
structural controls: Areas and volumes of cratonic sediments, western North America and eastern Europe
(Sloss, L. L.) 4(5): 272-276
— Areas and volumes of cratonic sediments, western North America and eastern Europe; discussion and reply
(Bond, G., *et al.*) 5(7): 393-394
— Evidence for continental subsidence in North America during the Late Cretaceous global submergence
(Bond, G.) 4(9): 557-560
— Jurassic sedimentation in the High Atlas Mountains of Morocco during early rifting of Africa and North America
(Evans, I., *et al.*) 2(6): 295-296
— Late Precambrian evolution of North America; plate tectonics implications; discussion and reply
(Mattis, A. F., *et al.*) 4(6): 325-326
— Modern and ancient sedimentary basins; comparative accumulation rates
(Schwab, F. L.) 4(12): 723-727
— Oceanic crust and arc-trench gap tectonics in southwestern British Columbia
(Anderson, P.) 4(7): 443-446
— Oceanic crust and arc-trench gap tectonics in southwestern British Columbia; discussion and reply
(Cole, M. R., *et al.*) 5(6): 325-329
— Paleorifting between the Gregory and Ethiopian rifts
(Cerling, T. E., *et al.*) 5(7): 441-444
— Silurian (Llandovery) downdropping of the western margin of North America
(Johnson, J. G., *et al.*) 3(6): 331-334

sedimentation—cyclic processes
causes: Possible galactic causes for synchronous sedimentation sequences of the North American and eastern European cratons
(Steiner, J.) 1(2): 89-92
— Steiner's galacto-geologic correlations; discussion
(Johnson, J. G.) 2(1): 25
changes of level: Cenozoic sedimentation cycles in Western Australia
(Quilty, P. G.) 5(6): 336-340
controls: Ground-water formation of dolomite in the Coorong region of South Australia
(Von der Borch, C. C., *et al.*) 3(5): 283-285
indicators: Pleistocene stratigraphy in southern Florida based on amino acid diagenesis in fossil Mercenaria
(Mitterer, R. M.) 2(9): 425-428
lithofacies: Subaqueous evaporites of the Carboniferous Otto Fiord Formation, Canadian Arctic Archipelago; a summary
(Davies, G. R., *et al.*) 3(5): 273-278
marine environment: Late Ordovician-Early Silurian glaciation and the Ordovician-Silurian boundary in the northern Canadian Cordillera
(Lenz, A. C.) 4(5): 313-317
— Late Ordovician-Early Silurian glaciation and the Ordovician-Silurian boundary in the northern Canadian Cordillera; discussions and replies
(Johnson, J. G., *et al.*) 4(12): 795-797
— The late Pleistocene record of productivity fluctuations in the eastern equatorial Pacific Ocean
(Adelseck, C. G., Jr., *et al.*) 6(7): 388-391

sedimentation—deposition
analogs: Possible modern analogs for rocks of the Franciscan Complex, Mount Oso area, California
(Raymond, L. A.) 2(3): 143-146
basins: Faulting and halokinetics in the northeastern Mediterranean between Cyprus and Turkey
(Evans, G., *et al.*) 6(7): 392-396
carbonate compensation depth: Cenozoic calcium carbonate distribution and calcite compensation depth in the central equatorial Pacific Ocean
(Van Andel, T. H., *et al.*) 2(2): 87-92
geosynclines: Correlation between Cambrian rocks of the southern Appalachian Geosyncline and the interior low plateaus
(Kidd, J. T., *et al.*) 4(12): 767-769
turbidite: Uplifted turbidite basins on the seaward wall of the Peru Trench
(Prince, R. A., *et al.*) 2(12): 607-611

sedimentation—environment
coastal environment: Coastal barrier changes, 1770-1867, Biscayne Bay area, Florida
(Chardon, R. E.) 6(6): 333-336
— Estimating water depths from analysis of barrier island and deltaic sedimentary sequences
(Klein, G. deV.) 2(8): 409-412
— Upper Cretaceous arc-trench gap sedimentation on the Alaska Peninsula
(Mancini, E. A., *et al.*) 6(7): 437-439
deep-sea environment: Preservation of diatoms in glacial to Holocene deep-sea sediments of the equatorial Pacific
(Mikkelsen, N.) 6(9): 553-555
deltas: Satellite observation of the subaerial growth of the Atchafalaya Delta, Louisiana
(Rouse, L. J., Jr., *et al.*) 6(7): 405-408
desiccation: Bromine content of Mediterranean halite
(Kuhn, R., *et al.*) 2(5): 213-216
— Bromine content of Mediterranean halite; discussion and reply
(Kendall, A. C., *et al.*) 2(11): 524-526
lakes: Freshwater-lake sediments beneath Block Island Sound
(Bertoni, R., *et al.*) 5(10): 631-635
— Green River Formation of Utah and Colorado and playa-lake deposition; discussion
(Moussa, M. T.) 4(6): 326, 382
— Playa-lake deposition; Green River Formation, Piceance Creek basin, Colorado
(Lundell, L. L., *et al.*) 3(9): 493-497
marine environment: Early Paleozoic continental margin sedimentation, trilobite biofacies, and the thermocline, western United States
(Cook, H. E., *et al.*) 3(10): 559-562
— Franciscan limestones and their environments of deposition
(Wachs, D., *et al.*) 3(1): 29-33
— Franciscan limestones and their environments of deposition; discussion and reply
(Raymond, L. A., *et al.*) 3(6): 294-296
— Lithofacies as a function of depth in the Strait of Sicily
(Maldonado, A., *et al.*) 5(2): 111-117
— Paleoceanography of the Mesozoic Alpine Tethys; summary
(Hsu, K. J.) 3(6): 347-348
— Sedimentological significance of nodular and laminated anhydrite
(Dean, W. E., *et al.*) 3(7): 367-372
— Sodium; paleosalinity indicator in ancient carbonate rocks
(Veizer, J., *et al.*) 5(3): 177-179
— Summary of Silurian and Lower Devonian basin and basin-slope limestones, Copenhagen Canyon, Nevada
(Matti, J. C., *et al.*) 2(12): 575-577
platforms: Middle Devonian paleogeography of the Wabash Platform, Indiana, Illinois, and Ohio
(Droste, J. B., *et al.*) 3(5): 269-272
— Middle Devonian paleogeography of the Wabash Platform, Indiana, Illinois, and Ohio; discussion
(Sparling, D. R.) 3(12): 677-678
reefs: Lithoherms in the Straits of Florida
(Neumann, A. C., *et al.*) 5(1): 4-10
— Submarine botryoidal aragonite in Holocene reef limestones, Belize
(Ginsburg, R. N., *et al.*) 4(7): 431-436
schizohaline environment: Construction of limpid dolomite
(Weaver, C. E.) 3(8): 425-428
shelf environment: Shallow-marine origin for Ordovician rocks of the Ouachita Mountains, Arkansas
(Davies, D. K., *et al.*) 4(6): 340-344
tidal flats: Remanent magnetization of modern tidal flat sediments from San Francisco Bay, California
(Graham, S.) 2(5): 223-226

sedimentation—precipitation
coatings: Duration of hydrothermal activity at an oceanic spreading center, Mid-Atlantic Ridge (lat 26°N)
(Scott, R. B., *et al.*) 4(4): 233-236
reefs: Former magnesian calcite and aragonite submarine cements in upper Paleozoic reefs of the Canadian Arctic; a summary
(Davies, G. R.) 5(1): 11-15

sedimentation—processes
dolomitization: Diagenetic dolomite formation related to Paleozoic paleogeography of the Cordilleran miogeocline in Nevada
(Dunham, J. B., *et al.*) 6(9): 556-559
micritization: Submarine recrystallization of a coral skeleton in a Holocene Bahamian reef
(Scherer, M.) 2(10): 499-500
reworking: Ice gouge recurrence and rates of sediment reworking, Beaufort Sea, Alaska
(Reimnitz, E., *et al.*) 5(7): 405-408

sedimentation—provenance
continental margin: Framework mineralogy and chemical composition of continental margin-type sandstone
(Schwab, F. L.) 3(9): 487-490
gravel: Composition sorting of topographically high Tennessee River gravels; a glacial hypothesis
(Kaye, J. M.) 2(1): 45-47
loess: Distant source of 1976 dustfall in Illinois and Pleistocene weather models
(Van Heuklon, T. K.) 5(11): 693-695
mountains: Remnant mountains in Early Ordovician seas of the El Paso region, Texas and New Mexico
(Kottlowski, F. E., *et al.*) 1(3): 137-140

sedimentation—rates
absolute age: Cretaceous phases of rapid sediment accumulation, continental shelf, eastern USA
(Whitten, E. H. T.) 4(4): 237-240
applications: Subdivision of Ordovician and Silurian time scale using accumulation rates of graptolitic shale
(Churkin, M., Jr., *et al.*) 5(8): 452-456
deep-sea environment: Selection of sample intervals in deep-sea sedimentary cores
(Ledbetter, M. T., *et al.*) 4(5): 303-304
diastems: Diastem factor in Mississippian rocks of the northern Rocky Mountains
(Sando, W. J.) 3(11): 657-660
limestone: An estimate of the duration of the faunal change at the Cretaceous-Tertiary boundary
(Kent, D. V.) 5(12): 769-771
paleobathymetry: Cenozoic migration of the Pacific Plate, northward shift of the axis of deposition, and paleobathymetry of the central equatorial Pacific
(Van Andel, T. H.) 2(10): 507-510
reefs: Thickest recorded Holocene reef section, Isla Perez core hole, Alacran Reef, Mexico
(Macintyre, I. G., *et al.*) 5(12): 749-754
sedimentation—transport
debris flows: New evidence for occurrence of debris flow deposits in the deep sea
(Embley, R. W.) 4(6): 371-374
glacial transport: Glacial deposits identified by chattermark trails in detrital garnets
(Folk, R. L.) 3(8): 473-475
— Quartz sand surface textural evidence for a glacial origin of the Squantum "tillite," Boston Basin, Massachusetts
(Rehmer, J. A., *et al.*) 2(8): 413-415
— Quartz sand surface textural evidence for a glacial origin of the Squantum "Tillite," Boston Basin, Massachusetts; discussions and reply
(Stuart, C. J., *et al.*) 3(3): 153-155
marine transport: Abyssal furrows and hyperbolic echo traces on the Bahama outer ridge
(Hollister, C. D., *et al.*) 2(8): 395-400
— Amazon River sediment transport in the Atlantic Ocean
(Gibbs, R. J.) 4(1): 45-48
— Anatomy of a shoreface-connected sand ridge on the New Jersey shelf; implications for the genesis of the shelf surficial sand sheet
(Stahl, L., *et al.*) 2(3): 117-120
— Cambrian tropical storm waves in Wisconsin
(Dott, R. H., Jr.) 2(5): 243-246
— Cambrian tropical storm waves in Wisconsin; discussions and reply
(Novak, I. D., *et al.*) 2(12): 572
— Displacement of Yukon-derived sediment from Bering Sea to Chukchi Sea during Holocene time
(Nelson, H., *et al.*) 5(3): 141-146
— Distribution of opal and quartz on the ocean floor of the subtropical southeastern Pacific
(Molina-Cruz, A., *et al.*) 5(2): 81-84
— Possible rip current origin for bottom ripple zones to 30-m depth
(Reimnitz, E., *et al.*) 4(7): 395-400
— Rate of lateral migration of adjoining sea-marginal sedimentary environments shown by historical records, Authie Bay, France
(LeFournier, J., *et al.*) 2(10): 497-498
— Role of canyons in the growth of the Campeche Escarpment
(Lindsay, J. F., *et al.*) 3(9): 533-536
— Sand-wave fields in Taiwan Strait
(Boggs, S., Jr.) 2(5): 251-253
— Steady-state trenches?
(Helwig, J., *et al.*) 2(7): 309-316
— Steady-state trenches?; discussion and reply
(Moore, G. F., *et al.*) 3(4): 221-223
— Suspended-matter distribution in the New York Bight apex related to Hurricane Belle
(Young, R. A.) 6(5): 301-304
processes: Analysis of microtextures on quartz sand grains from lower Cook Inlet, Alaska
(Hampton, M. A., *et al.*) 6(2): 105-110
stream transport: Abrasion in place; a mechanism for rounding and size reduction of coarse sediments in rivers
(Schumm, S. A., *et al.*) 1(1): 37-40
— Channel changes
(Emmett, W. W.) 2(6): 271-272
— Channel responses to artificial stream capture, Death Valley, California
(Dzurisin, D.) 3(6): 309-312
— Effects of varying discharge regimes on bed-form sedimentary structures in modern rivers
(Jones, C. M.) 5(9): 567-570
— Erosion caused by intense rainfall in a small catchment in New York State
(Renwick, W. H.) 5(6): 361-364
— Estimated erosion rates on Mount Rainier, Washington
(Mills, H. H.) 4(7): 401-406
— Flooding in Big Thompson River, Colorado, tributaries, controls on channel erosion and estimates of recurrence interval
(Balog, J. D.) 6(4): 200-204
turbidity currents: Current-meter recordings of low-speed turbidity currents
(Shepard, F. P., *et al.*) 5(5): 297-301
— Large-scale traction-produced structures in deep-water fan-channel conglomerates in southern Chile
(Winn, R. D., Jr., *et al.*) 5(1): 41-44
— Late Quaternary sedimentation in the active eastern Aleutian Trench
(Piper, D. J. W., *et al.*) 1(1): 19-22
— Paleocurrents in part of the Franciscan Complex, California
(Telleen, K. E.) 5(1): 49-51
— Resedimented pelagic carbonate and volcaniclastic sediments and sedimentary structures in Leg 30 DSDP cores from the western equatorial Pacific
(Klein, G. deV.) 3(1): 39-42
— Submarine meandering thalweg and turbidity currents flowing for 4,000 km in the Northwest Atlantic Mid-Ocean Channel, Labrador Sea
(Chough, S., *et al.*) 4(9): 529-533
wind transport: Impact of Hurricane Belle on Assateague Island washover
(Fisher, J. S., *et al.*) 5(12): 765-768
— Origin of Mojave Desert dust plumes photographed from space
(Nakata, J. K., *et al.*) 4(11): 644-648
sediments *see also* sedimentary rocks; sedimentary structures; sedimentation
sediments—carbonate sediments
diagenesis: Diagenesis of magnesian calcite; evidence from miliolacean foraminifera
(Towe, K. M., *et al.*) 4(6): 337-339
— Limestone compaction; an enigma
(Shinn, E. A., *et al.*) 5(1): 21-24
digenesis: Destructive diagenesis of carbonate sediments in the eastern Skagerrak, North Sea
(Alexandersson, E. T.) 6(6): 324-327
genesis: Ground-water formation of dolomite in the Coorong region of South Australia
(Von der Borch, C. C., *et al.*) 3(5): 283-285
ooze: Deep-sea carbonates; acoustic reflectors and lysocline fluctuations
(Berger, W. H., *et al.*) 6(1): 11-15
textures: Radial aragonite ooids, Lizard Island, Greater Barrier Reef, Queensland, Australia
(Davies, P. J., *et al.*) 4(2): 120-122
sediments—chemically precipitated sediments
calcrete: Displacive calcite; evidence from recent and ancient calcretes
(Watts, N. L.) 6(11): 699-703
evaporites: Magnesium hydroxychloride; a possible pH buffer in marine evaporite brines?
(Bodine, M. W., Jr.) 4(2): 76-80

— Sedimentological significance of nodular and laminated anhydrite
(Dean, W. E., *et al.*) 3(7): 367-372
weathering crust: Magnetic spherules from the Mid-Atlantic Ridge
(Aumento, F., *et al.*) 3(7): 407-410
— Weathering rinds as a relative-age criterion; application to subdivision of glacial deposits in the Cascade Range
(Porter, S. C.) 3(3): 101-104
sediments—clastic sediments
age: Comment: relative age dating techniques . . .
(White, S. E.) 2(7): 326
— Relative age dating techniques and a late Quaternary chronology, Arikaree Cirque, Colorado
(Carroll, T.) 2(7): 321-325
clay: Geochemistry of geopressured geothermal waters from the Frio Clay in the Gulf Coast region of Texas
(Kharaka, Y. K., *et al.*) 5(4): 241-244
environmental analysis: New evidence for pre-Wisconsin flooding in the channeled scabland of eastern Washington
(Patton, P. C., *et al.*) 6(9): 567-571
— Stratigraphic, morphologic, and pedologic evidence of large floods in humid environments
(Costa, J. E.) 2(6): 301-303
grain size: Abrasion in place; a mechanism for rounding and size reduction of coarse sediments in rivers
(Schumm, S. A., *et al.*) 1(1): 37-40
gravel: Composition sorting of topographically high Tennessee River gravels; a glacial hypothesis
(Kaye, J. M.) 2(1): 45-47
loess: Distant source of 1976 dustfall in Illinois and Pleistocene weather models
(Van Heuklon, T. K.) 5(11): 693-695
mud: Remanent magnetization of modern tidal flat sediments from San Francisco Bay, California
(Graham, S.) 2(5): 223-226
provenance: Stratigraphy and origin of surficial deposits in sinkholes in South-central Indiana
(Hall, R. D.) 4(8): 507-509
sand: Analysis of microtextures on quartz sand grains from lower Cook Inlet, Alaska
(Hampton, M. A., *et al.*) 6(2): 105-110
— Baseline concentrations of hydrocarbons in barrier-island quartz sand, northeastern Gulf of Mexico
(Palacas, J. G., *et al.*) 4(2): 81-84
— Comparison between sieving and settling-tube determinations of sand sizes by using discriminant analysis
(Jones, J. R., *et al.*) 4(12): 741-744
— Comparison between sieving and settling-tube determinations of sand sizes by using discriminant analysis; discussion
(Fisher, J. J.) 5(5): 264
textures: Chattermark trails on heavy minerals in glacial sediments
(Gravenor, C. P., *et al.*) 6(1): 61-63
— Glacial deposits identified by chattermark trails in detrital garnets
(Folk, R. L.) 3(8): 473-475
— Glacial deposits identified by chattermark trails in detrital garnets; discussion and reply
(Buil, P. A., *et al.*) 5(4): 248-249
— Glacial deposits identified by chattermark trails in detrital garnets; discussion and reply
(Rocha-Campos, A. C., *et al.*) 6(1): 8-10
till: Human factor in till-fabric analysis
(Drake, L. D.) 5(3): 180-184
— On the interpretation of till fabrics
(Mark, D. M.) 2(2): 101-104
— On the interpretation of till fabrics; discussion and reply
(Mills, H. H.) 4(9): 516-518
— Pre-Twocreekan age of the type Valders Till, Wisconsin
(Mickelson, D. M., *et al.*) 3(10): 587-590
— Relationships of till to bed rock in the Lake Superior region
(Dell, C. I.) 3(10): 563-564
volcanic ash: Deep-sea evidence for distribution of tephra from the mixed magma eruption of the Soufriere on St. Vincent, 1902; ash turbidites and air fall
(Carey, S. N., *et al.*) 6(5): 271-274
— Tragic base surge in 1790 at Kilauea volcano
(Swanson, D. A., *et al.*) 1(2): 83-86
sediments—composition
calcium carbonate: Cenozoic calcium carbonate distribution and calcite compensation depth in the central equatorial Pacific Ocean
(Van Andel, T. H., *et al.*) 2(2): 87-92
— Optimum indices of calcium carbonate dissolution in deep-sea sediments
(Thunell, R. C.) 4(9): 525-528
mineral composition: Distribution of opal and quartz on the ocean floor of the subtropical southeastern Pacific
(Molina-Cruz, A., *et al.*) 5(2): 81-84
siliceous composition: Preservation of diatoms in glacial to Holocene deep-sea sediments of the equatorial Pacific
(Mikkelsen, N.) 6(9): 553-555
sediments—environmental analysis
barrier islands: Estimating water depths from analysis of barrier island and deltaic sedimentary sequences
(Klein, G. deV.) 2(8): 409-412
fresh-water environment: Freshwater-lake sediments beneath Block Island Sound
(Bertoni, R., *et al.*) 5(10): 631-635
sediments—geochemistry
isotopes: Strontium-isotope stratigraphy of a Red Sea core
(Boger, P. D., *et al.*) 2(4): 181-183
sediments—lithofacies
environmental analysis: Late Quaternary sedimentation in the active eastern Aleutian Trench
(Piper, D. J. W., *et al.*) 1(1): 19-22
— Lithofacies as a function of depth in the Strait of Sicily
(Maldonado, A., *et al.*) 5(2): 111-117
sediments—pore water
geochemistry: Interstitial silica in deep-sea sediments from the North Pacific
(Heath, G. R., *et al.*) 1(4): 181-184
— Methane production and consumption in anoxic marine sediments
(Barnes, R. O., *et al.*) 4(5): 297-300
sediments—textures
grain size: Grain-size distribution within glacial varves
(Peach, P. A., *et al.*) 3(1): 43-46
— No real advantage; discussion
(Hails, J. R., *et al.*) 2(2): 71
— Proposal for a particle-size grade scale based on 10; with discussion
(Shea, J. H.) 1(1): 3-8
seismic surveys *see under* geophysical surveys *under* Atlantic Ocean; Gulf of Mexico; Mediterranean Sea; Pacific Ocean; Rhode Island; Western U.S.
seismology *see also* engineering geology
seismology—crust
deep seismic sounding: Nature of the Wind River thrust, Wyoming, from COCORP deep-reflection data and from gravity data
(Smithson, S. B., *et al.*) 6(11): 648-652
seismology—earthquakes
dilatancy: Post-earthquake dilatancy recovery
(Scholz, C. H.) 2(11): 551-554
— Post-earthquake dilatancy recovery; discussion
(Plafker, G.) 3(2): 61
— Processes during the Matsushiro, Japan, earthquake swarm as revealed by leveling, gravity, and spring-flow observations
(Kisslinger, C.) 3(2): 57-67
precursors: Elevation changes preceding the San Fernando earthquake of February 9, 1971
(Castle, R. O., *et al.*) 2(2): 61-66
— Matsushiro, Japan, earthquake swarm; confirmation of the dilatancy-fluid diffusion model
(Nur, A.) 2(5): 217-221

— Precursory and coseismic water-pressure variations in stick-slip experiments
(Sundaram, P. N., *et al.*) 4(2): 108-110
— Precursory variation of seismicity rate in the Assam area, India
(Khattri, K., *et al.*) 6(11): 685-688
— Water-level fluctuations and earthquakes on the San Andreas fault zone
(Kovach, R. L., *et al.*) 3(8): 437-440
prediction: Application of linear statistical models of earthquake magnitude versus fault length in estimating maximum expectable earthquakes
(Mark, R. K.) 5(8): 464-466

seismology—seismicity
crust: Subduction of the Nazca Plate beneath central Peru
(James, D. E.) 6(3): 174-178

shale *see under* clastic rocks *under* sedimentary rocks

shore features *see* shore features *under* geomorphology

shorelines *see also under* engineering geology *under* Florida; Maryland; Texas

shorelines—changes
monitoring: Monitoring the coastal environment
(Morisawa, M., *et al.*) 2(8): 385-388

silicates *see* silicates *under* minerals

silicon—abundance
plutonic rocks: Plutonic zones in the Peninsular Ranges of southern California and northern Baja California; discussion and reply
(Baird, A. K., *et al.*) 3(12): 676-677

sills *see* sills *under* intrusions

Silurian *see also under* stratigraphy *under* Canada

Silurian—geochronology
time scales: Subdivision of Ordovician and Silurian time scale using accumulation rates of graptolitic shale
(Churkin, M., Jr., *et al.*) 5(8): 452-456

Silurian—paleobotany
Plantae: The advent of land plant life
(Gray, J., *et al.*) 6(8): 489-492

Silurian—paleontology
Brachiopoda: The depths inhabited by Silurian brachiopod communities; discussion and reply
(Shabica, S. V., *et al.*) 4(3): 132,187-191
— The depths inhabited by Silurian brachiopod communities; discussion and reply
(Hurst, J. M., *et al.*) 4(12): 709-712

slope stability *see also* engineering geology; geomorphology; *see* slope stability *under* engineering geology *under* California; Colorado; Oregon; Puerto Rico; Rocky Mountains

slope stability—landslides
isopleth maps: Preparation and use of isopleth maps of landslide deposits; discussion and reply
(Vitek, J. D., *et al.*) 3(4): 217-218

Society Islands—tectonophysics
plate tectonics: K-Ar ages of Tahiti and Moorea, Society Islands, and implications for the hot-spot model
(Dymond, J.) 3(5): 236-240

sodium—abundance
carbonate rocks: Sodium; paleosalinity indicator in ancient carbonate rocks
(Veizer, J., *et al.*) 5(3): 177-179

soil mechanics *see also* rock mechanics

soils—erosion
landslides: Impact of clear-cutting and road construction on soil erosion by landslides in the western Cascade Range, Oregon
(Swanson, F. J., *et al.*) 3(7): 393-396

soils—soil group
paleosols: Paleosol caliche in the New Haven Arkose, Connecticut; record of semiaridity in Late Triassic-Early Jurassic time
(Hubert, J. F.) 5(5): 302-304
— Stratigraphy and origin of surficial deposits in sinkholes in South-central Indiana
(Hall, R. D.) 4(8): 507-509

soils—surveys
Washington: New evidence for pre-Wisconsin flooding in the channeled scabland of eastern Washington
(Patton, P. C., *et al.*) 6(9): 567-571

solubility *see under* properties *under* geochemistry

South Africa—geochemistry
isotopes: Metamorphic alteration of carbon isotopic composition in ancient sedimentary organic matter; new evidence from Australia and South Africa
(McKirdy, D. M., *et al.*) 2(12): 591-595

South Africa—geomorphology
meteor craters: New evidence for impact origin of the Bushveld Complex, South Africa
(Rhodes, R. C.) 3(10): 549-554

South Africa—petrology
igneous rocks: First kimberlite conference, Republic of South Africa
(MacGregor, I. D.) 2(3): 151-152

South Africa—stratigraphy
Proterozoic: Possible galactic causes for geologic events; comment
(Visser, J. N. J.) 2(6): 279

South America *see also* Andes; Brazil; Chile; Colombia; Guyana; Peru

South America—petrology
intrusions: Circum-Pacific Plutonism Project meetings in South America
(Bateman, P. C.) 2(2): 85-86

South America—seismology
crust: Compressional faulting of the oceanic crust prior to subduction in the Peru-Chile Trench
(Hussong, D. M., *et al.*) 3(10): 601-604
earthquakes: Spatial distribution of earthquakes and subduction of the Nazca Plate beneath South America
(Barazangi, M., *et al.*) 4(11): 686-692
— Spatial distribution of earthquakes and subduction of the Nazca Plate beneath South America; discussion
(Noble, D. C., *et al.*) 5(9): 576-578

South America—structural geology
neotectonics: Uplifted turbidite basins on the seaward wall of the Peru Trench
(Prince, R. A., *et al.*) 2(12): 607-611

South America—tectonophysics
plate tectonics: Geologic evolution of the Northern Nazca Plate
(Rea, D. K., *et al.*) 2(7): 317-320
— Tholeiitic basalt ridge in the Peru Trench
(Kulm, L. D., *et al.*) 1(1): 11-14

South Australia—petrology
metamorphic rocks: Are pseudotachylites products of fracture or fusion?
(Wenk, H. R.) 6(8): 507-511

South Australia—sedimentary petrology
sedimentation: Ground-water formation of dolomite in the Coorong region of South Australia
(Von der Borch, C. C., *et al.*) 3(5): 283-285

South Carolina—seismology
earthquakes: Normal faulting and in situ stress in the South Carolina coastal plain near Charleston
(Zoback, M. D., *et al.*) 6(3): 147-152

South Carolina—structural geology
neotectonics: Normal faulting and in situ stress in the South Carolina coastal plain near Charleston
(Zoback, M. D., *et al.*) 6(3): 147-152

South-West Africa—paleontology
ichnofossils: Possible sprigginid worm and a new trace fossil from the Nama Group, South West Africa
(Germs, G. J. B.) 1(2): 69-70

Southern Hemisphere *see also* Africa; Antarctic Ocean; Antarctica; Atlantic Ocean; Indian Ocean; Pacific Ocean; South America

Southern Hemisphere—petrology
metamorphic rocks: Paired metamorphic belts in Precambrian granulite rocks in Gondwanaland
(Katz, M. B.) 2(5): 237-241

Southern Hemisphere—stratigraphy
continental drift: Permian-Triassic continental configurations and the origin of the Gulf of Mexico; discussion
(Holden, J. C.) 4(6): 324-325
— Proposed origin for Guianian diamonds
(Reid, A. R.) 2(2): 67-68

Southwestern U.S.—environmental geology
land use: Gravel mining impact; discussion and reply
(Mannion, L. E., *et al.*) 2(10): 496
— Impact of mining gravel from urban stream beds in the southwestern United States
(Bull, W. B., *et al.*) 2(4): 171-174

Southwestern U.S.—tectonophysics
plate tectonics: Paleosubduction geometries inferred from Cretaceous and Tertiary magmatic patterns in southwestern North America
(Keith, S. B.) 6(9): 516-521

Soviet Union *see* USSR

springs *see also* ground water

stratigraphy—classification
boundary: Status of late Cenozoic boundaries
(Van Couvering, J. A.) 6(3): 169

stratigraphy—concepts
biostratigraphy: On the content of biostratigraphy as a science; discussion
(Reguant, S.) 3(5): 231

stratigraphy—nomenclature
Holocene: Time-stratigraphic nomenclature for the Holocene Epoch
(Hopkins, D. M.) 3(1): 10

stratigraphy—symposia
biostratigraphy: Symposium; Concepts and methods in biostratigrahy: I and II
(Kauffman, E. G., *et al.*) 2(2): 82-83

stromatolites *see* stromatolites *under* algae

strontium—abundance
volcanic ash: Scavenging of volcanic aerosol by ash; atmospheric and volcanologic implications
(Rose, W. I., Jr.) 5(10): 621-624
volcanic rocks: Indonesian active volcanic arc; K, Sr, and Rb variation with depth to the Benioff zone
(Hutchison, C. S.) 4(7): 407-408
— Relationship between depth to Benioff zone and K and Sr concentrations in volcanic rocks of Chile
(Palacios M., C., *et al.*) 3(10): 595-596

strontium—isotopes
Sr-87/Sr-86: Geochemistry of late Cenozoic lavas from eastern Indonesia; role of subducted sediments in petrogenesis
(Whitford, D. J., *et al.*) 5(9): 571-575
— Kaersutites, suboceanic low-velocity zone, and the origin of mid-oceanic ridge basalts
(Basu, A. R., *et al.*) 5(6): 365-368
— Rb-Sr systematics in granite from central Nepal (Manaslu); significance of the Oligocene age and high $^{87}Sr/^{86}Sr$ ratio in Himalayan Orogeny
(Hamet, J., *et al.*) 4(8): 470-472
— Sr-isotopic evidence for an old mantle source region for French Polynesian volcanism
(Duncan, R. A., *et al.*) 4(12): 728-732
— Strontium-isotope stratigraphy of a Red Sea core
(Boger, P. D., *et al.*) 2(4): 181-183
— Strontium isotopic evidence relating to the evolution of the lower Precambrian granitic crust in Swaziland
(Davies, R. D., *et al.*) 4(9): 553-556
— $^{87}Sr/^{86}Sr$ ratios in some volcanic rocks and some semifused inclusions of the San Francisco volcanic field
(Pushkar, P., *et al.*) 3(11): 669-671

structural analysis *see also* folds; foliation

structural analysis—experimental studies
lamellae: Structure and significance of planar deformation features in synthetic quartz
(Twiss, R. J.) 2(7): 329-332
— Substructures of deformation lamellae in quartz
(Christie, J. M., *et al.*) 2(8): 405-408

structural analysis—faults
batholiths: Boulder Batholith; a result of emplacement of a block detached from the Idaho batholith infrastructure?
(Hyndman, D. W., *et al.*) 3(7): 401-404

structural analysis—folds
fold axes: Fold distortion; a new indicator of tectonic transport direction
(Alvarez, W.) 6(11): 657-660
interference patterns: Setting of alaskite bodies in the northwestern Adirondacks, New York
(Foose, M. P., *et al.*) 5(2): 77-80

structural analysis—foliation
cleavage: Formation of spaced cleavage and folds in brittle limestone by dissolution
(Alvarez, W., *et al.*) 4(11): 698-701
— Orientation of underthrusting during latest Cretaceous and earliest Tertiary time, Kodiak Islands, Alaska
(Moore, J. C.) 6(4): 209-213
experimental studies: Compositional differentiation in an experimentally deformed salt-mica specimen
(Means, L. D., *et al.*) 2(1): 15-16
slaty cleavage: Dewatering origin of cleavage in light of deformed calcite veins and clastic dikes in Martinsburg Slate, Delaware water gap, New Jersey
(Beutner, E. C., *et al.*) 5(2): 118-122
— Rotation and dewatering during slaty cleavage formation; some new evidence and interpretations
(Alterman, I. B.) 1(1): 33-36
— Slaty cleavage and the dewatering hypothesis; an examination of some critical evidence
(Geiser, P. A.) 3(12): 717-720
— Slaty cleavage and the dewatering hypothesis; an examination of some critical evidence; discussions and reply
(Alterman, I. B., *et al.*) 4(12): 789-794
slip cleavage: Quantitative theory for metamorphic differentiation in development of crenulation cleavage
(Fletcher, R. C.) 5(3): 185-187
— Quantitative theory for metamorphic differentiation in development of crenulation cleavage; discussion and reply
(Durney, D. W., *et al.*) 6(2): 68-69
— "Slip" cleavage caused by pressure solution in a buckle fold
(Groshong, R. H., Jr.) 3(7): 411-413

structural analysis—fractures
joints: Estimation of coal-cleat orientation using surface-joint and photolinear analysis
(Diamond, W. P., *et al.*) 3(12): 687-690
— Subsurface extensions of the Santa Rita-Hanover Axis; a major early Tertiary structure, New Mexico
(Aldrich, M. J., Jr.) 6(6): 373-376

structural analysis—interpretation
dislocations: Sheared lherzolites; from the point of view of rock mechanics
(Goetze, C.) 3(4): 172-173
melange: Gravity results and emplacement geometry of the Sulawesi ultramafic belt, Indonesia
(Silver, E. A., *et al.*) 6(9): 527-531
— Melanges in the Franciscan Complex, a product of triple-junction tectonics
(Fox, K. F., Jr.) 4(12): 737-741
— Middle to Late Cretaceous sedimentary melange, Franciscan Complex, northern California
(Gucwa, P. R.) 3(3): 105-109
— Possible modern analogs for rocks of the Franciscan Complex, Mount Oso area, California
(Raymond, L. A.) 2(3): 143-144
— Tectonite and melange; a distinction
(Raymond, L. A.) 3(1): 7-
— Tectonite and melange; a distinction; discussion and reply
(Beutner, E. C., *et al.*) 3(7): 358-35

mylonite: Eastern Piedmont fault system; speculations on its extent (Chapman, J. J.) 6(10): 580-582
petrofabrics: Sedimentary fabrics and their relation to strain-analysis methods (Boulter, C. A.) 4(3): 141-146
pseudotechylite: Are pseudotachylites products of fracture or fusion? (Wenk, H. R.) 6(8): 507-511

structural analysis—lineation
boudinage: Deformation by soft-sediment extension in the Coastal Belt, Franciscan Complex (Kleist, J. R.) 2(10): 501-504

structural analysis—methods
mathematical methods: Rotations by spherical trigonometry (Beck, M. E., Jr.) 4(4): 215-216

structural analysis—preferred orientation
olivine: Mechanisms of preferred orientations of olivine in tectonite peridotite (Ave Lallemant, H. G.) 3(11): 653-656
— Mechanisms of preferred orientations of olivine in tectonite peridotite; discussion and reply (Shelley, D., *et al.*) 4(9): 518-520

structural geology—classification
tectonite: Tectonite and melange; a distinction (Raymond, L. A.) 3(1): 7-9
— Tectonite and melange; a distinction; discussion and reply (Beutner, E. C., *et al.*) 3(7): 358-359

structural geology—concepts
definition: Discussion of the concept of orogeny (King, P. B.) 2(1): 24
orogeny: Concept of orogeny (Cebull, S. E.) 1(3): 101-102
— Concept of orogeny; discussion and reply (Wang, C. S., *et al.*) 4(7): 388-389

structural geology—instruments
sun compass: A poorperson's sun compass (Verosub, K. L.) 5(5): 319

structural geology—nomenclature
orogenic belts: Pangeaic orogenic system (Hurley, P. M.) 2(8): 373-376

structural geology—symposia
metamorphic belts: Penrose Conference report; Tectonic significance of metamorphic core complexes in the North American Cordillera (Crittenden, M., Jr., *et al.*) 6(2): 79-80
orogeny: Penrose Conference report; Late orogenic sedimentation and tectonics of the Cordilleran and Appalachian orogens (Eisbacher, G. H., *et al.*) 4(8): 458
report: Second Penrose Field Conference; the Brevard zone (Hatcher, R. D., Jr.) 3(3): 149-152
rift zones: Penrose Conference report; geology of the Rio Grande Graben (Cordell, L., *et al.*) 3(8): 420-421

structural petrology *see* structural analysis

sulfates *see under* minerals

sulfides *see* sulfides *under* minerals

surveys *see* surveys *under* general *under* Ethiopia

surveys—general
U. S. Geological Survey: Career status and opportunities for women earth scientists in the Geologic Division of the U. S. Geological Survey (Davis, R. E.) 5(8): 495-497

Swaziland—geochronology
Archean: Strontium isotopic evidence relating to the evolution of the lower Precambrian granitic crust in Swaziland (Davies, R. D., *et al.*) 4(9): 553-556

Sweden—stratigraphy
Cretaceous: Epifaunal zonation on an Upper Cretaceous rocky coast (Surlyk, F., *et al.*) 2(11): 529-534

symposia—areal geology
China: Penrose Conference report; Erik Norin Penrose Conference on Tibet (Molnar, P., *et al.*) 5(8): 461-463

symposia—economic geology
coal: Symposium; Western coal: energy crisis vs. environmental impact (Talbot, J. L.) 2(2): 79-80
— Technical session; Geologic aspects of coal conversion (Barlow, J. A.) 2(2): 78-79

symposia—extraterrestrial geology
Mars: Symposium; Challenge of Mars (Ulrich, G. E.) 2(2): 81-82

symposia—general
geology: American women in geology (Schwarzer, T. F., *et al.*) 5(8): 493

symposia—geochronology
paleomagnetism: Late Cenozoic magnetostratigraphy; comparisons with bio-, climato-, and lithozones (Kukla, G., *et al.*) 3(12): 704-707
Pliocene: Penrose Conference report; Pliocene and Pleistocene geochronology (Damon, P. E., *et al.*) 4(10): 591-593

symposia—geophysical surveys
magnetic methods: Penrose Conference report; geologic interpretation of magnetic data (Blake, M. C., Jr., *et al.*) 3(6): 329-330

symposia—hydrogeology
statistical methods: Penrose Conference report; Geostatistical concepts and stochastic methods in hydrogeology (Freeze, R. A., *et al.*) 6(5): 297-298

symposia—paleontology
Vertebrata: Symposium; Vertebrate paleontology as a discipline in geochronology: I, II, III (Savage, D. E., *et al.*) 2(2): 83-84

symposia—petrology
crust: Ophiolites in the Earth's crust; a symposium, field excursions, and cultural exchange in the USSR (Coleman, R. G.) 1(2): 51-54
kimberlite: First kimberlite conference, Republic of South Africa (MacGregor, I. D.) 2(3): 151-152

symposia—sedimentary petrology
dolomitization: Penrose Conference report; Water and carbonate rocks (Freeman, T. (convener), *et al.*) 2(4): 179-180

symposia—stratigraphy
archaeology: Symposium; Archaeological geology: New World (Johnson, D. L.) 2(2): 77-78
biostratigraphy: Symposium; Concepts and methods in biostratigrahy: I and II (Kauffman, E. G., *et al.*) 2(2): 82-83
Quaternary: Special report; INQUA in New Zealand (Fairbridge, R. W.) 2(10): 505-506

symposia—structural geology
metamorphic belts: Penrose Conference report; Tectonic significance of metamorphic core complexes in the North American Cordillera (Crittenden, M., Jr., *et al.*) 6(2): 79-80
orogeny: Penrose Conference report; Late orogenic sedimentation and tectonics of the Cordilleran and Appalachian orogens (Eisbacher, G. H., *et al.*) 4(8): 458
rift zones: Penrose Conference report; geology of the Rio Grande Graben (Cordell, L., *et al.*) 3(8): 420-421
tectonics: Penrose Conference report; regional geophysics and tectonics of the Intermountain West (Smith, R. B., *et al.*) 4(7): 437-438
— Second Penrose Field Conference; the Brevard zone (Hatcher, R. D., Jr.) 3(3): 149-152

symposia—tectonophysics
geodynamics: Penrose Conference report; geodynamics of continental interiors (Kahle, C. F., *et al.*) 5(7): 431-432
hydrothermal processes: Symposium report; Hydrothermal systems at oceanic spreading centers (Rona, P. A., *et al.*) 6(5): 299-300
lithosphere: Penrose Conference report; Lithosphere-asthenosphere boundary (Jordan, T. H., *et al.*) 4(12): 770-772

plate tectonics: Penrose Conference report; Gulf of California rift system and its implications for the tectonics of western North America
(Elders, W. A. (convener), *et al.*) 3(2): 85-87
— Penrose Conference report; Paleozoic margins of paleo-American and paleo-Eurafrican plates; drifting or rifting
(Skehan, J. W., *et al.*) 4(3): 185-186
— Penrose Conference report; pre-Mesozoic plate tectonics; how far back in Earth history can the Wilson Cycle be extended?
(Dewey, J. F., *et al.*) 3(8): 422-424

Tahiti—geochronology
Cenozoic: K-Ar ages of Tahiti and Moorea, Society Islands, and implications for the hot-spot model
(Dymond, J.) 3(5): 236-240

Taiwan—geomorphology
processes: Denudation of Taiwan Island since the Pliocene Epoch
(Li, Y. H.) 4(2): 105-107

Taiwan—geophysical surveys
acoustical surveys: Sand-wave fields in Taiwan Strait
(Boggs, S., Jr.) 2(5): 251-253

tectonics *see also* epeirogeny; faults; folds; geosynclines; orogeny; structural analysis; *see also under* structural geology *under* Africa; Alabama; Alps; Appalachians; Atlantic Coastal Plain; Atlantic Ocean; Atlantic region; California; Canadian Shield; China; Colorado Plateau; Delaware; Europe; France; Great Britain; Greenland; Indonesia; Maryland; Mediterranean Sea; Montana; Nevada; New Mexico; New York; Newfoundland; North America; Northern Hemisphere; Northwest Territories; Oklahoma; Oregon; Pacific Coast; Pennsylvania; Quebec; Rocky Mountains; Romania; symposia; Tennessee; Utah; Virginia; Washington; Western Interior; Western U.S.; Wyoming

tectonics—concepts
mobile belts: Pangeaic orogenic system
(Hurley, P. M.) 2(8): 373-376

tectonics—evolution
metamorphic belts: Penrose Conference report; Tectonic significance of metamorphic core complexes in the North American Cordillera
(Crittenden, M., Jr., *et al.*) 6(2): 79-80

tectonics—structure
fold belts: Plate tectonics of marginal foreland thrust-fold belts
(Coney, P. J.) 1(3): 131-134
rift zones: Western margin of Australia; a Mesozoic analog of the East African Rift system
(Veevers, J. J., *et al.*) 4(12): 713-717

tectonics—vertical tectonics
estimation: Speculations on real sea-level changes and vertical motions of continents at selected times in the Cretaceous and Tertiary periods
(Bond, G.) 6(4): 247-250

tectonophysics—concepts
Wegener: Alfred Wegener's reconstruction of Pangea
(Drake, E. T.) 4(1): 41-44
— Wegener fit; discussion
(Teichert, C.) 4(4): 200

tectonophysics—nomenclature
spreading centers: Spreading center terms and concepts
(Luyendyk, B. P., *et al.*) 4(6): 369-370
— Spreading center terms and concepts; discussion and reply
(Kirkpatrick, S. R., *et al.*) 4(10): 631

tectonophysics—practice
plate tectonics: Acceptance of plate tectonic theory by geologists
(Nitecki, M. H., *et al.*) 6(11): 661-664

tectonophysics—symposia
geodynamics: Penrose Conference report; geodynamics of continental interiors
(Kahle, C. F., *et al.*) 5(7): 431-432
hydrothermal processes: Symposium report; Hydrothermal systems at oceanic spreading centers
(Rona, P. A., *et al.*) 6(5): 299-300
lithosphere: Penrose Conference report; Lithosphere-asthenosphere boundary
(Jordan, T. H., *et al.*) 4(12): 770-772

plate tectonics: Penrose Conference report; Gulf of California rift system and its implications for the tectonics of western North America
(Elders, W. A. (convener), *et al.*) 3(2): 85-87
— Penrose Conference report; Paleozoic margins of paleo-American and paleo-Eurafrican plates; drifting or rifting
(Skehan, J. W., *et al.*) 4(3): 185-186
— Penrose Conference report; pre-Mesozoic plate tectonics; how far back in Earth history can the Wilson Cycle be extended?
(Dewey, J. F., *et al.*) 3(8): 422-424
— Penrose Conference report; regional geophysics and tectonics of the Intermountain West
(Smith, R. B., *et al.*) 4(7): 437-438

tektites *see* tektites *under* petrology *under* Caribbean Sea

tektites—properties
magnetic properties: Natural remanent magnetism of tektites of the muong-nong type and its bearing on models of their origin
(de Gasparis, A. A., *et al.*) 3(10): 605-607

Tennessee—structural geology
tectonics: Cranmore Cove-Chattanooga fault system; a model for the structure along the Allegheny front in southern Tennessee
(Milici, R. C., *et al.*) 3(3): 111-113

Tertiary *see also under* stratigraphy *under* Pacific Coast; Utah

Tertiary—tectonophysics
plate tectonics: Plate tectonics of marginal foreland thrust-fold belts
(Coney, P. J.) 1(3): 131-134

Texas—engineering geology
shorelines: Mapping the physical environment in economic terms
(Mathewson, C. C., *et al.*) 3(11): 627-629
— Mapping the physical environment in economic terms; discussions and reply
(Kerr, R. S., *et al.*) 4(5): 260-264

Texas—geochemistry
sediments: Geochemistry of geopressured geothermal waters from the Frio Clay in the Gulf Coast region of Texas
(Kharaka, Y. K., *et al.*) 5(4): 241-244

Texas—sedimentary petrology
diagenesis: Calcitization of Edwards Group dolomites in the Balcones fault zone aquifer, South-central Texas
(Abbott, P. L.) 2(7): 359-362
sedimentation: Remnant mountains in Early Ordovician seas of the El Paso region, Texas and New Mexico
(Kottlowski, F. E., *et al.*) 1(3): 137-140

Texas—structural geology
neotectonics: Quaternary faulting in Trans-Pecos Texas
(Muehlberger, W. R., *et al.*) 6(6): 337-340

thermal waters *see also under* hydrogeology *under* Pacific Coast

thrust faults *see* thrust faults *under* displacements *under* faults

titanium—geochemistry
magmas: Geochemical regularities and genetic significance of ophiolitic basalts
(Sun, S. S., *et al.*) 6(11): 689-693

Tonga—petrology
lava: Lavas from Niuafo'ou Island, Tonga, resemble ocean-floor basalts
(Reay, A., *et al.*) 2(12): 605-606

trace elements *see* trace elements *under* alkali basalt family *under* igneous rocks; *see under* andesite-rhyolite family *under* igneous rocks; *see* trace elements *under* geochemistry *under* California; lava; metamorphic rocks; Ontario; rare earths

trenches *see* trenches *under* ocean floors

Triassic *see also under* geochronology *under* California; *see* Triassic *under* stratigraphy *under* Utah; Western Hemisphere

Triassic—stratigraphy
continental drift: Permian-Triassic continental configurations and the origin of the Gulf of Mexico; discussion
(Holden, J. C.) 4(6): 324-325

Trilobita—biogeography
affinities: Significance of fossiliferous Middle Cambrian rocks of Rhode Island to the history of the Avalonian microcontinent
(Skehan, J. W., *et al.*) 6(11): 694-698

controls: Early Paleozoic continental margin sedimentation, trilobite biofacies, and the thermocline, western United States
(Cook, H. E., *et al.*) 3(10): 559-562
underground water *see* ground water
United States *see also* the individual states and regions
United States—economic geology
energy sources: Limits to power growth
(Cheney, E. S.) 2(6): 261
United States—environmental geology
conservation: Limits to power growth
(Cheney, E. S.) 2(6): 261
impact statements: Environmental impact statements; worthwhile or worthless?
(Lessing, P., *et al.*) 3(5): 241-242
United States—general
geology: Geology and public policy
(Lundgren, L.) 4(11): 657-660
United States—tectonophysics
crust: Aeromagnetics and the transition between the Colorado Plateau and basin range provinces
(Shuey, R. T., *et al.*) 1(3): 107-110
USSR—geomorphology
meteor craters: El'gygytgyn; probably world's largest meteorite crater
(Dietz, R. S., *et al.*) 4(7): 391-392
— El'gygytgyn; probably world's largest meteorite crater; discussion and reply
(Pike, R. J., *et al.*) 5(5): 262-263
USSR—petrology
igneous rocks: Ophiolites in the Earth's crust; a symposium, field excursions, and cultural exchange in the USSR
(Coleman, R. G.) 1(2): 51-54
Utah—environmental geology
geologic hazards: Earthquake hazards in sensitive clays along the central Wasatch Front, Utah
(Parry, W. T.) 2(11): 559-560
Utah—stratigraphy
Cretaceous: Palynology, age, and correlation of the Wanship Formation and their implications for the tectonic history of northeastern Utah
(Nichols, D. J., *et al.*) 6(7): 430-433
Permian: Permian-Triassic sequence in Northwest Utah
(Clark, D. L., *et al.*) 5(11): 655-658
Tertiary: Age of structural differentiation between the Colorado Plateau and Basin and Range provinces in southwestern Utah
(Rowley, P. D., *et al.*) 6(1): 51-55
Triassic: Magnetic polarity sequence of the Upper Triassic Kayenta Formation
(Steiner, M. B., *et al.*) 2(4): 191-194
— Permian-Triassic sequence in Northwest Utah
(Clark, D. L., *et al.*) 5(11): 655-658
— Reproducible anomalous Upper Triassic magnetization
(Steiner, M. B., *et al.*) 2(4): 195-198
Utah—structural geology
neotectonics: Patterns of displacement along the Wasatch Fault
(Hamblin, W. K.) 4(10): 619-622
tectonics: Age of structural differentiation between the Colorado Plateaus and Basin and Range provinces in southwestern Utah
(Lovejoy, E. M. P., *et al.*) 6(9): 572-575
varves *see* varves *under* planar bedding structures *under* sedimentary structures
Vertebrata *see also* ichnofossils; Mammalia; Pisces; problematic fossils
Virginia—environmental geology
maps: Practical use of geologic information by planners
(Van Driel, J. N.) 6(10): 592-596
Virginia—structural geology
faults: Triassic-Jurassic faulting in eastern North America; a model based on pre-Triassic structures
(Lindholm, R. C.) 6(6): 365-368
tectonics: Stafford fault system; structures documenting Cretaceous and Tertiary deformation along the Fall Line in northeastern Virginia
(Mixon, R. B., *et al.*) 5(7): 437-440
volcanic features *see under* geomorphology
volcanism *see* volcanism *under* volcanology
volcanoes *see* volcanoes *under* volcanology
volcanology—volcanism
age: Age of trachyte from Ross Island, Antarctica
(Forbes, R. B., *et al.*) 2(6): 297-298
— K-Ar ages of Pleistocene rhyolitic volcanism in the Coso Range, California
(Lanphere, M. A., *et al.*) 3(6): 339-341
— K-Ar ages of the volcanics in the Rattlesnake Hills, central Wyoming
(Pekarek, A. H., *et al.*) 2(6): 283-285
cauldrons: Geophysical evidence for a volcanic subsidence feature near Silver Cliff, Colorado
(Kleinkopf, M. D., *et al.*) 5(7): 445-447
classification: Petrology and chemistry of Guadalupe Island; an alkalic seamount on a fossil ridge crest
(Batiza, R.) 5(12): 760-764
deep-water environment: Variolitic structure in Ordovician pillow lava and its possible significance as an environmental indicator
(Furnes, H.) 1(1): 27-30
eruptions: Ash-flow fissure vent in West-central Nevada
(Ekren, E. B., *et al.*) 4(4): 247-251
— Eureka Valley Tuff, East-central California and adjacent Nevada
(Noble, D. C., *et al.*) 2(3): 139-142
— Late Cenozoic ring faulting and volcanism in the Coso Range area of California
(Duffield, W. A.) 3(6): 335-338
— Products of ignimbrite eruptions
(Sparks, R. S. J., *et al.*) 1(3): 115-118
evolution: From island arc to oceanic islands; Fiji, southwestern Pacific
(Gill, J. B.) 4(2): 123-126
extent: Volcanism in the Rattlesnake Hills of central Wyoming; a paleomagnetic study
(Shive, P. N., *et al.*) 5(9): 563-566
geochemistry: Magma contamination within the volcanic pile; origin of andesite and dacite
(Eichelberger, J. C.) 2(1): 29-33
— Relationship between depth to Benioff zone and K and Sr concentrations in volcanic rocks of Chile
(Palacios M., C., *et al.*) 3(10): 595-596
— Sr-isotopic evidence for an old mantle source region for French Polynesian volcanism
(Duncan, R. A., *et al.*) 4(12): 728-732
mid-ocean ridges: Preliminary model for extrusion and rifting at the axis of the Mid-Atlantic Ridge, 36°48′ north
(Moore, J. G., *et al.*) 2(9): 437-440
periodicity: Episodic volcanism in the central Oregon Cascade Range
(McBirney, A. R., *et al.*) 2(12): 585-589
— Episodic volcanism in the central Oregon Cascade Range; confirmation and correlation with the Snake River plain; discussion
(Armstrong, R. L.) 3(7): 356-357
pumice flows: The ignimbrite source problem; significance of a co-ignimbrite lag-fall deposit
(Wright, J. V., *et al.*) 5(12): 729-732
volcanology—volcanoes
Alaska: Spectacular mobility of ash flows around Aniakchak and Fisher calderas, Alaska
(Miller, T. P., *et al.*) 5(3): 173-176
Antarctica: Present volcanic activity on Mount Erebus, Ross Island, Antarctica
(Giggenbach, W. F., *et al.*) 1(3): 135-136
Guatemala: Scavenging of volcanic aerosol by ash; atmospheric and volcanologic implications
(Rose, W. I., Jr.) 5(10): 621-624
Hawaii: Isostatic models of the February 1969 east rift eruption of Kilauea
(Goles, G. G.) 4(12): 783-786
— Tragic base surge in 1790 at Kilauea volcano
(Swanson, D. A., *et al.*) 1(2): 83-86

Italy: Classification and formation of lava levees on Mount Etna, Sicily
(Sparks, R. S. J., *et al.*) 4(5): 269-271
— Effusion rate and the shape of aa lava flow-fields on Mount Etna
(Wadge, G.) 6(8): 503-506
Washington: Mount Baker eruptions
(Easterbrook, D. J.) 3(12): 679-682
West Indies: Deep-sea evidence for distribution of tephra from the mixed magma eruption of the Soufriere on St. Vincent, 1902; ash turbidites and air fall
(Carey, S. N., *et al.*) 6(5): 271-274
— Mount Pelee, Martinique; a pattern of alternating eruptive styles
(Roobol, M. J., *et al.*) 4(9): 521-524

Wales—sedimentary petrology
sediments: Glacial deposits identified by chattermark trails in detrital garnets; discussion and reply
(Bull, P. A., *et al.*) 5(4): 248-249

Washington—environmental geology
geologic hazards: Mount Baker eruptions
(Easterbrook, D. J.) 3(12): 679-682

Washington—geomorphology
processes: Estimated erosion rates on Mount Rainier, Washington
(Mills, H. H.) 4(7): 401-406
weathering: Weathering rinds as a relative-age criterion; application to subdivision of glacial deposits in the Cascade Range
(Porter, S. C.) 3(3): 101-104

Washington—petrology
metamorphism: On elongate olivine of metamorphic orgin
(Evans, B. W., *et al.*) 2(3): 131-132
— Significance of coexisting lawsonite, prehnite, and aragonite in the San Juan Islands, Washington
(Glassley, W. E., *et al.*) 4(5): 301-302

Washington—stratigraphy
Pleistocene: New evidence for pre-Wisconsin flooding in the channeled scabland of eastern Washington
(Patton, P. C., *et al.*) 6(9): 567-571
— Weathering rinds as a relative-age criterion; application to subdivision of glacial deposits in the Cascade Range
(Porter, S. C.) 3(3): 101-104

Washington—structural geology
tectonics: Initial deep-sea sediment deformation at the base of the Washington continental slope; response to subduction
(Carson, B., *et al.*) 2(11): 561-564

waste disposal *see also under* engineering geology *under* New York

waterways *see* waterways *under* engineering geology *under* California

waterways—channels
design: Channelization; a search for a better way
(Keller, E. A.) 3(5): 246-248

weathering *see also under* geomorphology *under* California; Washington; *see also under* sedimentary petrology *under* Columbia Plateau; Missouri; New York

weathering—environment
submarine environment: Thermal contraction and alteration of the oceanic crust
(Epp, D., *et al.*) 6(12): 726-728

weathering—igneous rocks
basalt: Progressive weathering of submarine basalt with age; further evidence of sea-floor spreading
(Salisbury, M. H., *et al.*) 1(2): 63-64

weathering—minerals
feldspar: Mechanism of feldspar weathering; some observational evidence
(Berner, R. A., *et al.*) 5(6): 369-372

weathering—processes
analysis: Is there a correlation between geomagnetic fluctuations and weathering processes?
(Fleisher, P. J.) 4(11): 702
exfoliation: Insolation warmed over
(Rice, A.) 4(1): 61-62
— Insolation warmed over; discussion
(Garner, H. F.) 4(5): 264

well-logging—radioactivity
gamma-ray methods: Spectral gamma logging in crystalline basement rocks
(West, F. G., *et al.*) 4(10): 617-618

West Indies *see also* Bahamas; Barbados; Dominican Republic; Puerto Rico

West Indies—petrology
magmas: Deep-sea evidence for distribution of tephra from the mixed magma eruption of the Soufriere on St. Vincent, 1902; ash turbidites and air fall
(Carey, S. N., *et al.*) 6(5): 271-274

West Indies—volcanology
Mont Pelee: Mount Pelee, Martinique; a pattern of alternating eruptive styles
(Roobol, M. J., *et al.*) 4(9): 521-524

West Virginia—stratigraphy
Devonian: Occurrence of Foerstia (Protosalvinia) in Lincoln County, West Virginia
(Schwietering, J. F., *et al.*) 6(8): 493-494

West Virginia—structural geology
fractures: Estimation of coal-cleat orientation using surface-joint and photolinear analysis
(Diamond, W. P., *et al.*) 3(12): 687-690

Western Australia—stratigraphy
changes of level: Cenozoic sedimentation cycles in Western Australia
(Quilty, P. G.) 5(6): 336-340
continental drift: Early Cretaceous breakup of Gondwanaland off Western Australia
(Larson, R. L.) 5(1): 57-60

Western Australia—tectonophysics
plate tectonics: Western margin of Australia; a Mesozoic analog of the East African Rift system
(Veevers, J. J., *et al.*) 4(12): 713-717

Western Hemisphere *see also* Atlantic Ocean; Central America; North America; Pacific Ocean; South America

Western Hemisphere—geomorphology
fluvial features: The incomplete flood plain, revisited; discussion and reply
(Garner, H. F., *et al.*) 2(6): 280-281

Western Hemisphere—stratigraphy
Permian: Permian-Triassic continental configurations and the origin of the Gulf of Mexico
(Van der Voo, R., *et al.*) 4(3): 177-180
— Permian-Triassic continental configurations and the origin of the Gulf of Mexico; discussion and reply
(Rod, E., *et al.*) 4(11): 703
Triassic: Permian-Triassic continental configurations and the origin of the Gulf of Mexico
(Van der Voo, R., *et al.*) 4(3): 177-180
— Permian-Triassic continental configurations and the origin of the Gulf of Mexico; discussion and reply
(Rod, E., *et al.*) 4(11): 703

Western Interior—structural geology
tectonics: Interpretation of a gravity profile across the western Snake River plain, Idaho
(Mabey, D. R.) 4(1): 53-55

Western Interior—tectonophysics
plate tectonics: Interpretation of a gravity profile across the western Snake River plain, Idaho
(Mabey, D. R.) 4(1): 53-55

Western U.S.—economic geology
copper: Distribution and genesis of fluorite deposits in the western United States and their significance to metallogeny
(Lamarre, A. L., *et al.*) 6(4): 236-238
fluorspar: Distribution and genesis of fluorite deposits in the western United States and their significance to metallogeny
(Lamarre, A. L., *et al.*) 6(4): 236-238
gravel: Gravel mining impact; discussion and reply
(Mannion, L. E., *et al.*) 2(10): 496
— Impact of mining gravel from urban stream beds in the southwestern United States
(Bull, W. B., *et al.*) 2(4): 171-174

manganese: Manganese deposited by submarine hot springs in chert-greenstone complexes, western United States
(Snyder, W. S.) 6(12): 741-744
molybdenum: Distribution and genesis of fluorite deposits in the western United States and their significance to metallogeny
(Lamarre, A. L., *et al.*) 6(4): 236-238
oil shale: Fossil catfish and the depositional environment of the Green River Formation, Wyoming
(Buchheim, H. P., *et al.*) 5(4): 196-198

Western U.S.—geophysical surveys
seismic surveys: Nature of the Wind River thrust, Wyoming, from COCORP deep-reflection data and from gravity data
(Smithson, S. B., *et al.*) 6(11): 648-652

Western U.S.—paleontology
biogeography: Early Paleozoic continental margin sedimentation, trilobite biofacies, and the thermocline, western United States
(Cook, H. E., *et al.*) 3(10): 559-562

Western U.S.—petrology
inclusions: Upper-mantle diapirism; evidence from analogous features in alpine peridotite and ultramafic inclusions in basalt
(Wilshire, H. G., *et al.*) 3(8): 467-470

Western U.S.—structural geology
tectonics: Aeromagnetics and the transition between the Colorado Plateau and basin range provinces
(Shuey, R. T., *et al.*) 1(3): 107-110
— Penrose Conference report; regional geophysics and tectonics of the Intermountain West
(Smith, R. B., *et al.*) 4(7): 437-438

Western U.S.—tectonophysics
crust: Yellowstone Hot Spot; new magnetic and seismic evidence
(Smith, R. B., *et al.*) 2(9): 451-455
plate tectonics: Distribution and genesis of fluorite deposits in the western United States and their significance to metallogeny
(Lamarre, A. L., *et al.*) 6(4): 236-238
— Silurian (Llandovery) downdropping of the western margin of North America
(Johnson, J. G., *et al.*) 3(6): 331-334
— Upper mantle origin of Sierra Nevada uplift
(Crough, S. T., *et al.*) 5(7): 396-399

Wisconsin—engineering geology
nuclear facilities: History of reports on selected faults in southern and eastern Wisconsin
(Kuntz, C. S., *et al.*) 4(4): 241-246

Wisconsin—geochronology
Archean: Gneiss and migmatite of Archean age in the Precambrian basement of central Wisconsin
(Van Schmus, W. R., *et al.*) 5(1): 45-48

Wisconsin—geomorphology
glacial geology: Pre-Twocreekan age of the type Valders Till, Wisconsin
(Stieglitz, R. D., *et al.*) 6(3): 136

Wisconsin—stratigraphy
Cambrian: Cambrian tropical storm waves in Wisconsin
(Dott, R. H., Jr.) 2(5): 243-246
— Cambrian tropical storm waves in Wisconsin; discussions and reply
(Novak, I. D., *et al.*) 2(12): 572
Pleistocene: Pre-Twocreekan age of the type Valders Till, Wisconsin
(Mickelson, D. M., *et al.*) 3(10): 587-590

worms—evolution
phylogeny: Primitive fossil flatworm from Alaska; new evidence bearing on ancestry of the Metazoa
(Allison, C. W.) 3(11): 649-652

Wyoming—geochronology
Eocene: K-Ar ages of the volcanics in the Rattlesnake Hills, central Wyoming
(Pekarek, A. H., *et al.*) 2(6): 283-285

Wyoming—geophysical surveys
magnetic surveys: Yellowstone Hot Spot; new magnetic and seismic evidence
(Smith, R. B., *et al.*) 2(9): 451-455

Wyoming—stratigraphy
Eocene: Fossil catfish and the depositional environment of the Green River Formation, Wyoming
(Buchheim, H. P., *et al.*) 5(4): 196-198
— Volcanism in the Rattlesnake Hills of central Wyoming; a paleomagnetic study
(Shive, P. N., *et al.*) 5(9): 563-566

Wyoming—structural geology
tectonics: Nature of the Wind River thrust, Wyoming, from COCORP deep-reflection data and from gravity data
(Smithson, S. B., *et al.*) 6(11): 648-652

Wyoming—tectonophysics
plate tectonics: Plate tectonics and foreland basement deformation
(Lowell, J. D.) 2(6): 275-278
— Plate tectonics and foreland basement deformation; discussion and reply
(Woodward, L. A., *et al.*) 2(12): 570-571
— Yellowstone Hot Spot; new magnetic and seismic evidence
(Smith, R. B., *et al.*) 2(9): 451-455

xenoliths *see* xenoliths *under* inclusions

Yugoslavia—geochemistry
brines: Magnesium hydroxychloride; a possible pH buffer in marine evaporite brines?
(Bodine, M. W., Jr.) 4(2): 76-80

Geology Cumulative Author Index
Volumes 1 - 6

Abbott, M. J. 5(9): 571-575
Abbott, P. L. 2(7): 359-362
Abrahams, A. D. 3(6): 307-308
Abrams, M. J. 5(12): 713-718
Ackermann, H. D. 4(3): 137-140
Adam, D. P. 3(11): 625-626
Adelseck, C. G., Jr. 6(7): 388-391
Aitken, J. D. 6(10): 626-629
Akiba, F. 6(2): 123-127
Al-Rawi, Y. 2(3): 139-142
Aldrich, M. J., Jr. 6(6): 373-376
Alexandersson, E. T. 6(6): 324-327
Allan, J. R. 5(1): 16-20
Allegre, C. J. 4(8): 470-472
Allegre, C. J. 6(4): 196-197
Alley, L. B. 1(3): 107-110
Alley, L. B. 2(9): 451-455
Allison, C. W. 1(2): 65-68
Allison, C. W. 2(4): 202-203
Allison, C. W. 3(11): 649-652
Allison, K. R. 2(9): 461-464
Allsopp, H. L. 4(9): 553-556
Alt, J. N. 2(2): 61-66
Alterman, I. B. 1(1): 33-36
Alterman, I. B. 4(12): 789-794
Alvarez, W. 4(11): 698-701
Alvarez, W. 6(5): 263-266
Alvarez, W. 6(11): 657-660
Anderson, J. J. 6(1): 51-55
Anderson, J. J. 6(9): 572-575
Anderson, J. L. 5(1): 45-48
Anderson, P. 4(7): 443-446
Anderson, P. 5(6): 325-329
Anderson, R. E. 5(7): 388-392
Anderson, R. Y. 3(7): 367-372
Anderson, T. F. 6(7): 388-391
Andrews, J. E. 3(1): 25-28
Andrews, J. T. 1(2): 75-80
Andrews, J. T. 2(7): 355-358
Andrews, J. T. 2(11): 522
Andrews, J. T. 3(11): 617-620
Andrews, J. T. 4(2): 73-75
Ardell, A. J. 2(8): 405-408
Arieh, E. J. 1(4): 159-161
Armstrong, A. K. 3(11): 661-664
Armstrong, R. L. 2(1): 35-40
Armstrong, R. L. 3(7): 356-357
Arndt, N. T. 5(10): 590-594
Arnold, L. B. 5(8): 493-494
Aronson, J. L. 2(11): 526
Aronson, J. L. 4(1): 16-20
Arth, J. G. 4(9): 534-536
Arth, J. G. 4(10): 596-600
Arth, J. G. 5(10): 590-594
Ashgirei, G. D. 2(8): 401-404
Ashley, R. P. 5(12): 713-718
Asquith, G. B. 1(4): 149-151
Atkinson, B. K. 3(8): 477-478
Audley-Charles, M. G. 5(6): 341-344
Aumento, F. 3(7): 407-410
Ave Lallemant, H. G. 3(11): 653-656
Ave Lallemant, H. G. 4(9): 518-520
Avraham, Z. B. 4(11): 661-664
Ayala, F. J. 2(2): 69-71
Ayrton, S. 6(8): 454-455
Babcock, E. A. 4(1): 4-6
Babulski, D. 3(1): 34
Bachman, S. B. 6(8): 461-463
Back, W. (convener) 2(4): 179-180
Badham, J. P. N. 3(7): 373-376
Badham, J. P. N. 6(10): 621-625
Baer, A. J. 5(11): 651-653
Bahrami, B. 4(1): 56-60
Bailey, R. J. 3(10): 591-594
Bain, G. L. 4(3): 137-140
Bain, R. J. 3(3): 137-139
Baird, A. K. 1(1): 15-18
Baird, A. K. 2(1): 23-24
Baird, A. K. 2(10): 493-495
Baird, A. K. 3(12): 676-677
Baird, K. W. 2(10): 493-495
Baker, H. W. 3(3): 153-155
Baker, V. R. 6(9): 567-571
Balagna, J. P. 5(4): 237-240
Balazs, E. I. 2(2): 61-66
Baldwin, B. 2(6): 267-270
Balog, J. D. 6(4): 200-204
Bamber, E. W. 3(11): 661-664
Barazangi, M. 4(11): 686-692
Barazangi, M. 5(11): 699-704
Barker, F. 4(9): 534-536
Barker, F. 4(10): 596-600
Barlow, J. A. 2(2): 78-79
Barlow, J. A. 2(12): 571-572
Barnard, W. D. 2(11): 561-564
Barnes, G. G. 4(11): 644-648
Barnes, I. 3(12): 713-716
Barnes, P. W. 5(7): 405-408
Barnes, R. O. 4(5): 297-300
Barton, R. H. 6(9): 575
Basu, A. R. 5(6): 365-368
Bateman, P. C. 2(2): 85-86
Bateman, P. C. 5(4): 252-255
Bates, R. L. 2(4): 203-204
Batiza, R. 5(12): 760-764
Bearce, D. N. 5(8): 467-470
Beaty, C. B. 2(11): 565-567
Beck, M. E., Jr. 4(4): 215-216
Belcher, R. C. 6(6): 337-340
Belderson, R. H. 4(4): 196-197
Belderson, R. H. 6(12): 716-720
Bell, P. M. 2(9): 429-432
Belt, E. S. 6(11): 694-698
Bench, B. M. 3(12): 687-690
Bentley, R. D. 4(6): 375-381
Berger, W. H. 6(1): 11-15
Berner, R. A. 5(6): 369-372
Berry, W. B. N. 1(2): 55-60
Bertoni, R. 5(10): 631-635
Best, M. G. 3(8): 429-432
Beutner, E. C. 3(7): 358-359
Beutner, E. C. 5(2): 118-122
Beyth, M. 1(2): 81-82
Bickford, M. E. 3(9): 537-540
Bickle, M. J. 5(2): 68-71
Biehler, S. (convener) 3(2): 85-87
Billington, S. 5(11): 699-704
Bishop, D. G. 5(10): 595-599
Blake, M. C., Jr. 3(6): 329-330
Blakely, R. J. 3(1): 35-38
Blanchet, R. 6(10): 597-600
Blank, H. R. 6(1): 21-24
Bleahu, M. 2(8): 392-393
Bloch, S. 6(5): 275-277
Bodine, M. W., Jr. 4(2): 76-80
Boellstorff, J. 2(1): 21
Boellstorff, J. 5(11): 648-650
Boger, P. D. 2(4): 181-183
Boggs, S., Jr. 2(5): 251-253
Bohlen, S. R. 6(10): 582-585
Bolt, B. A. 6(4): 233-235
Bond, G. 4(9): 557-560
Bond, G. 5(7): 393-394
Bond, G. 6(4): 247-250
Bond, H. E. 2(6): 279-280
Borchardt, G. 6(8): 453-454
Borcos, M. 2(8): 392-393
Bosellini, A. 3(5): 279-282
Boucot, A. J. 1(2): 55-60
Boucot, A. J. 2(4): 204
Boucot, A. J. 4(3): 132,187-191
Boucot, A. J. 4(12): 709-712
Boucot, A. J. 6(8): 489-492
Boucot, A. J. 6(11): 646-647
Boudda, A. 2(7): 343-344
Boulter, C. A. 4(3): 141-146
Bouma, A. H. 6(2): 105-110
Bowes, D. R. 4(8): 499-501
Bowman, H. R. 3(9): 501-504
Bradley, R. S. 4(4): 197-198
Brady, M. J. 6(12): 713-715
Braziunas, T. F. 3(6): 342-343
van Breemen, O. 4(8): 499-501
Bregman, M. L. 4(12): 775-778
Brenckle, P. 2(9): 433-436
Bretsky, P. W. 1(4): 157
Brewer, J. 6(11): 648-652
Brewitt-Taylor, C. R. 3(9): 541-542
Bridwell, R. J. 3(11): 630-632
Briggs, G. 4(3): 173-176
Brookins, D. G. 2(11): 555-557
Brooks, C. 2(2): 107-110
Brooks, C. K. 5(9): 539-540
Brooks, E. R. 5(11): 653-654
Brown, B. W. 2(9): 456
Brown, B. W. 4(1): 9
Brown, P. A. 4(9): 561-564
Brune, J. N. 4(4): 206-210
Brunnschweiler, R. O. 2(1): 17-20
Buchheim, H. P. 5(4): 196-198
Bucknam, R. C. 6(3): 170-173
Buffler, R. T. 4(6): 365-368
Bull, P. A. 5(4): 248-249
Bull, W. B. 2(4): 171-174
Bull, W. B. 2(10): 496
Burchfiel, B. C. 2(8): 392-393
Burckle, L. H. 6(2): 123-127
Burckle, L. H. 6(4): 243-246
Burger, H. R. 3(6): 292-294
Burk, C. A. 3(3): 140-144
Burkart, B. 6(6): 328-332
Burke, K. 2(2): 57-60
Burke, K. 3(11): 613-616
Burke, K. 5(8): 461-463
Burke, R. B. 5(12): 749-754
Butler, R. F. 6(7): 425-429
Butler, R. F. 6(8): 495-498
Byers, C. W. 4(9): 565-567
Byers, F. M., Jr. 4(4): 247-251
Cadwell, D. H. 6(5): 278-280
Caldwell, J. G. 3(4): 221-223
Callender, E. 5(4): 241-244
van Calsteren, P. W. C. 6(11): 644-646
Cameron, B. 4(12): 741-744
Campbell, I. H. 5(12): 712
Campbell, R. H. 2(10): 483-485
Campbell, R. H. 3(4): 217-218
Cande, S. C. 5(6): 330-335
Carden, J. R. 2(6): 297-298
Carden, J. R. 5(9): 529-533
Carey, S. N. 6(5): 271-274
Carl, J. D. 5(2): 77-80
Carl, J. D. 6(9): 562-566
Carranza, A. 4(6): 365-368
Carroll, T. 2(7): 321-325
Carson, B. 2(11): 561-564
Carter, C. 5(8): 452-456
Case, J. E. 5(6): 377-383
Cassidy, W. 3(10): 605-607
Castle, R. O. 2(2): 61-66
Cavanaugh, M. D. 5(4): 207-211
Cavanaugh, M. D. 6(3): 132-135
Cebull, S. E. 1(3): 101-102
Cebull, S. E. 4(7): 388-389
Cebull, S. E. 4(10): 636-638
Cerling, T. E. 5(7): 441-444
Chanda, S. K. 6(4): 198-199
Chapman, D. S. 5(5): 265-268
Chapman, J. J. 6(10): 580-582
Chappell, B. W. 6(4): 239-242
Chardon, R. E. 6(6): 333-336
Charles, R. W. 5(4): 237-240
Chase, R. B. 3(7): 401-404
Chavez, P. S. 2(5): 231-234
Chayes, F. 4(1): 9-10
Cheney, E. S. 2(6): 261
Cheney, J. T. 3(3): 147-148
Chough, S. 4(9): 529-533
Christensen, N. I. 1(2): 63-64
Christensen, W. K. 2(11): 529-534
Christiansen, R. L. 1(2): 83-86
Christie, J. M. 2(8): 405-408
Christofferson, E. 6(6): 341-344
Church, W. R. 4(1): 7-8
Church, W. R. 4(10): 623-625
Churkin, M., Jr. 2(7): 339-342
Churkin, M., Jr. 5(8): 452-456
Ciesielski, P. F. 2(10): 511-515
Citron, G. P. 5(6): 324-325
Clague, D. 5(3): 133-136
Clague, D. 6(2): 70-74
Clak, D. F. 1(2): 61-62
Clark, B. C. 1(1): 15-18
Clark, B. C. 2(1): 23-24
Clark, D. L. 2(1): 41-44
Clark, D. L. 5(11): 655-658
Clark, J. A. 4(5): 310-312
Clark, J. A. 4(8): 452-454
Clark, J. A. 4(12): 797-798
Clark, S. H. B. 5(6): 377-383
Clarke, D. B. 6(4): 243-246
Clayton, L. 3(9): 498-500
Clayton, L. 4(1): 4-6
Cloud, P. 1(3): 123-127
Cloud, P. 1(3): 127
Colburn, I. P. 6(2): 105-110
Cole, M. R. 3(1): 2-4
Cole, M. R. 5(6): 325-329
Coleman, R. G. 1(2): 51-54
Collinson, C. 2(9): 433-436
Colman-Sadd, S. P. 4(9): 561-564
Combs, J. 3(7): 397-400
Compston, W. 4(12): 728-732
Compston, W. 5(9): 571-575
Conaghan, P. 3(12): 727-731
Conaghan, P. 4(7): 390
Conatore, P. D. 3(3): 147-148
Coney, P. J. 1(3): 131-134
Coney, P. J. 2(6): 267-270
Coney, P. J. 2(11): 527-528
Coney, P. J. 6(2): 79-80
Connelly, W. 5(9): 529-533
Cook, H. E. 3(10): 559-562
Coonrad, W. L. 2(7): 336-338
Cordell, L. 2(7): 363
Cordell, L. 3(8): 420-421
Costa, J. E. 2(6): 301-303

Costa, J. E. 2(12): 613-615
Costa, J. E. 6(10): 617-620
Cotterill, D. 4(12): 713-717
Cowan, D. S. 4(5): 301-302
Cox, A. 5(10): 585-589
Craddock, C. 1(4): 190
Craig, J. R. 2(8): 389-390
Crawford, M. L. 5(8): 493
Crawford, M. L. 5(8): 502-503
Creager, J. S. 5(3): 141-146
Crittenden, M., Jr. 6(2): 79-80
Crouch, J. K. 2(3): 147-150
Crough, S. T. 5(7): 396-399
Csejtey, B., Jr. 4(1): 49-52
Cunningham, R. H. W. 6(7): 405-408
Curray, J. R. 5(6): 341-344
Dacey, M. F. 5(12): 724-728
Dacey, M. F. 6(8): 453-454
Dallmeyer, R. D. 3(5): 243-245
Dalrymple, G. B. 3(6): 339-341
Dalrymple, G. B. 6(2): 70-74
Daly, L. 4(8): 455-457
Damon, P. E. 4(10): 591-593
Davies, D. K. 4(6): 340-344
Davies, G. R. 3(5): 273-278
Davies, G. R. 3(7): 367-372
Davies, G. R. 5(1): 11-15
Davies, P. J. 4(2): 120-122
Davies, R. D. 4(9): 553-556
Davis, G. 6(2): 79-80
Davis, R. E. 5(8): 495-497
de Boer, J. 6(3): 137-139
de Gasparis, A. A. 3(10): 605-607
De Keyser, T. L. 6(1): 5-8
De Roever, E. W. F. 2(10): 474-475
Dean, W. E. 3(7): 367-372
Deelman, J. C. 3(1): 23-24
Deelman, J. C. 3(6): 292-294
Deelman, J. C. 3(8): 471-472
Deelman, J. C. 3(8): 477-478
Deelman, J. C. 5(4): 249-252
Deelman, J. C. 5(5): 261-262
Deeter, T. M. 6(7): 437-439
Dell, C. I. 3(10): 563-564
DeLong, S. E. 3(12): 691-694
DeLong, S. E. 5(4): 199-202
Dengler, L. A. 6(5): 305-308
Dewey, J. F. 2(2): 57-60
Dewey, J. F. 2(8): 377-380
Dewey, J. F. 2(11): 543-546
Dewey, J. F. 3(8): 422-424
Dewey, J. F. 5(4): 199-202
Diamond, W. P. 3(12): 687-690
Dick, H. J. B. 2(1): 35-40
Dickinson, W. R. 2(3): 139-142
Dickinson, W. R. 2(6): 267-270
Dickinson, W. R. 2(9): 421-424
Dickinson, W. R. 3(2): 53-56
Dickson, J. A. D. 6(9): 560-561
Dietrich, V. 4(3): 147-152
Dietz, R. S. 4(7): 391-392
Dietz, R. S. 5(5): 262-263
Dill, R. F. 2(3): 155-159
Dillon, W. P. 4(8): 459-462
Dillon, W. P. 6(1): 56-60
Dixon, J. M. 5(12): 712
Donnelly, J. M. 5(8): 509-515
Donnelly, J. M. 6(11): 653-656
Donovan, T. J. 2(7): 351-354
Dott, R. H., Jr. 2(5): 243-246
Dott, R. H., Jr. 2(12): 572
Dott, R. H., Jr. 3(3): 153-155
Dott, R. H., Jr. 5(1): 41-44
Dowling, J. 5(10): 631-635
Dowsett, F. R. 5(11): 654
Drake, E. T. 4(1): 41-44
Drake, E. T. 6(10): 587-591
Drake, L. D. 5(3): 180-184
Droste, J. B. 3(5): 269-272
du Bray, E. 6(4): 205-208
DuChene, H. R. 3(3): 114-116
Duffield, W. A. 3(6): 335-338
Duncan, J. R. 1(1): 19-22
Duncan, R. A. 4(12): 728-732
Dunham, J. B. 6(9): 556-559
Dunne, K. C. 2(9): 461-464
Durney, D. W. 6(2): 68-69
Durney, D. W. 6(6): 369-372
Dury, G. H. 3(10): 585-586
Dyke, A. S. 2(3): 125-130
Dymond, J. 1(1): 11-14
Dymond, J. 1(4): 181-184
Dymond, J. 3(5): 236-240
Dyrness, C. T. 3(7): 393-396
Dzurisin, D. 3(6): 309-312
Easterbrook, D. J. 3(12): 679-682
Eaton, G. P. 4(7): 437-438
Eddy, A. C. 5(4): 237-240
Edwards, C. L. 6(2): 85-88
Eggler, D. H. 4(2): 69-72
Eggler, D. H. 4(4): 198-200
Eggler, D. H. 4(12): 712, 787-789
Eggler, D. H. 6(7): 397-400
Eichelberger, J. C. 2(1): 29-33
Eichelberger, J. C. 3(4): 164-168
Eisbacher, G. H. 4(8): 458
Eittreim, S. 3(10): 555-558
Ekren, E. B. 4(4): 247-251
Ekren, E. B. 5(7): 388-392
Elboushi, I. M. 5(9): 534-538
Elders, W. A. (convener) 3(2): 85-87
Eliason, E. M. 2(5): 231-234
Elliott, D. 1(3): 111
Ellis, D. J. 5(5): 278-280
Ellwood, B. B. 4(5): 303-304
Elthon, D. 6(8): 464-468
Embleton, B. J. J. 4(8): 455-457
Embley, R. W. 4(6): 371-374
Emmett, W. W. 2(6): 271-272
Emmons, D. L. 5(11): 696-698
Engelder, R. 5(8): 457-460
Engelder, T. 4(11): 698-701
Engelder, T. 5(8): 457-460
Engelder, T. 6(5): 263-266
England, R. N. 5(5): 278-280
Enos, P. 2(6): 289-290
Epp, D. 6(12): 726-728
Erdtmann, B. D. 6(2): 75-78
Ervin, C. P. 2(10): 517-519
Ervin, C. P. 3(3): 145-146
Essene, E. J. 6(10): 582-585
Evans, B. W. 2(3): 131-132
Evans, G. 5(6): 341-344
Evans, G. 6(7): 392-396
Evans, I. 2(6): 295-296
Evans, W. E. 6(7): 392-396
Evenson, E. B. 3(10): 587-590
Evitt, W. R. 2(12): 582-583
Evitt, W. R. 3(8): 433-436
Ewing, J. 3(10): 555-558
Fabbi, B. P. 3(9): 501-504
Fail, J. P. 4(8): 459-462
Fairbridge, R. W. 2(10): 505-506
Fairbridge, R. W. 6(2): 117-122
Fan, P. F. 6(7): 401-404
Farhoudi, G. 5(11): 664-668
Faul, H. 6(6): 377-383
Faure, G. 2(4): 181-183
Ferguson, J. 5(5): 278-280
Finch, R. C. 6(7): 440-447
Finney, S. C. 2(12): 575-577
Fisher, G. W. 1(1): 41-43
Fisher, G. W. 2(1): 28
Fisher, G. W. 2(2): 73-76
Fisher, J. J. 5(5): 264
Fisher, J. J. 6(4): 251-255
Fisher, J. S. 5(12): 765-768
Fisk, L. H. 2(12): 613-615
Fleck, R. J. 6(1): 51-55
Fleck, R. J. 6(9): 572-575
Fleisher, P. J. 4(11): 702
Fleming, H. S. 2(9): 437-440
Fletcher, R. C. 5(3): 185-187
Fletcher, R. C. 6(2): 68-69
Flint, R. F. 5(5): 305-308
Flood, R. D. 2(8): 395-400
Flood, R. H. 6(2): 81-84
Floyd, J. C. 3(7): 360
Foland, K. A. 6(3): 143-146
Foland, K. A. 6(3): 179-183
Folk, R. L. 3(8): 473-475
Folk, R. L. 4(6): 327-332
Folk, R. L. 5(4): 248-249
Folk, R. L. 6(1): 8-10
Foose, M. P. 5(2): 77-80
Forbes, R. B. 2(6): 297-298
Forbes, R. B. 5(9): 529-533
Fortner, R. D. 2(8): 389-390
Foster, R. W. 1(3): 137-140
Fox, K. F., Jr. 4(12): 737-740
Fox, P. J. 5(4): 199-202
Frankel, L. 5(10): 631-635
Freeman, T. (convener) 2(4): 179-180
Freeze, R. A. 6(5): 297-298
Freidline, R. O. 2(9): 451-455
French, R. B. 4(3): 177-180
French, R. B. 4(11): 703
Frey, F. A. 6(4): 239-242
Fridleifsson, I. B. 2(8): 381-384
Friedman, G. M. 2(10): 497-498
Friedman, I. 2(7): 351-354
Fuller, M. 3(10): 605-607
Funder, S. 2(7): 355-358
Funder, S. 2(11): 522
Furnes, H. 1(1): 27-30
Furnes, H. 2(8): 381-384
Fyfe, W. S. 4(12): 770-772
Gard, L. M. 3(8): 457-459
Garner, H. F. 2(6): 280-281
Garner, H. F. 3(5): 230-231
Garner, H. F. 4(5): 264
Gartner, S. 6(12): 708-712
Gass, I. G. 5(9): 534-538
Gastil, R. G. 2(8): 391
Gastil, R. G. 3(2): 84
Gastil, R. G. 3(7): 361-363
Gastil, R. G. 3(12): 676-677
Gastil, R. G. 4(1): 9
Gavasci, A. T. 3(7): 364-366
Geiser, P. A. 3(12): 717-720
Geiser, P. A. 4(12): 789-794
Geiser, P. A. 6(5): 263-266
Geitzenauer, K. 5(7): 400-404
Gelhar, L. W. 6(5): 297-298
Germs, G. J. B. 1(2): 69-70
Gerrild, P. M. 4(2): 81-84
Gibb, R. A. 5(3): 169-172
Gibb, R. A. 5(11): 651-653
Gibbs, R. J. 4(1): 45-48
Gibling, M. R. 5(3): 177-179
Giggenbach, W. F. 1(3): 135-136
Gill, J. B. 4(2): 123-126
Gill, J. B. 4(10): 625-631
Ginsburg, R. N. 4(7): 431-436
Giterman, R. E. 4(3): 169-172
Glass, B. P. 2(12): 599-602
Glassley, W. E. 4(5): 301-302
Gleadow, A. J. W. 5(9): 539-540
Gleason, J. D. 2(7): 351-354
Glikson, A. Y. 4(4): 201-205
Glikson, A. Y. 5(2): 68-71
Goetz, A. F. H. 5(12): 713-718
Goetz, L. K. 6(6): 337-340
Goetze, C. 3(4): 172-173
Goff, F. E. 5(8): 509-515
Goguel, J. 5(5): 260-261
Goguel, J. 6(8): 452-453
Gohn, G. S. 6(3): 147-152
Goldberg, E. D. 4(5): 297-300
Goles, G. G. 4(12): 783-786
Goodman, R. E. 4(2): 108-110
Gose, W. A. 5(8): 505-508
Gose, W. A. 6(7): 440-447
Got, H. 2(7): 345-350
Graham, S. 2(5): 223-226
Gravenor, C. P. 6(1): 61-63
Gray, J. 6(8): 489-492
Gray, J. 6(11): 646-647
Greeley, R. 1(4): 175-180
Green, D. H. 3(1): 11-14
Green, D. H. 3(1): 15-18
Green, T. H. 4(2): 85-88
Greene, H. G. 6(2): 70-74
Gresens, R. L. 6(1): 46-50
Grette, J. F. 2(11): 527-528
Grinshpan, Z. 3(4): 169-171
Grinshpan, Z. 4(7): 439-442
Gromme, C. S. 6(11): 653-656
Groshong, R. H., Jr. 3(7): 411-413
Grow, J. A. 5(10): 625-630
Gucwa, P. R. 3(3): 105-108
Guidotti, C. V. 3(3): 147-148
Gutierrez-E., M. 4(7): 395-400
Haile, N. S. 3(4): 174
Hails, J. R. 2(2): 71
Hall, G. A. 2(7): 309-316
Hall, G. A. 3(4): 221-223
Hall, R. D. 4(8): 507-509
Halley, R. B. 4(6): 361-364
Halley, R. B. 5(1): 21-24
Halley, R. B. 6(4): 198-199
Halls, C. 3(7): 373-376
Hamblin, W. K. 4(10): 619-622
Hamet, J. 4(8): 470-472
Hamet, J. 6(4): 196-197
Hamil, M. M. 6(6): 341-344
Hamilton, M. S. 6(1): 16-20
Hamilton, W. 5(3): 191
Hammer, S. 3(3): 145-146
Hammond, S. R. 2(10): 487-492
Hampton, M. A. 6(2): 105-110
Handschumacher, D. W. 3(1): 25-28
Hansen, H. J. 2(9): 449-450
Hanson, G. N. 3(6): 297-302
Hanson, G. N. 4(10): 625-631
Hargraves, R. B. 1(4): 185-186
Harp, E. L. 2(3): 121-124
Harper, H. E., Jr. 3(4): 175-177
Harris, W. B. 4(12): 761-762
Harrison, A. E. 2(9): 469-471
Harrison, J. E. 5(5): 309-312
Hart, S. R. 2(2): 107-110
Haskell, T. R. 2(12): 579-582
Haskell, T. R. 3(8): 476
Hastings, D. A. 2(10): 475-476
Hatcher, R. D., Jr. 3(3): 149-152
Hatcher, R. D., Jr. 5(10): 636-640
Haworth, R. T. 6(9): 522-526
Haxby, W. F. 4(3): 181-184
Hay, E. A. 4(12): 763-766
Hays, J. D. 4(11): 649-652
Hays, J. F. 5(7): 425-428
Hays, J. F. 5(12): 712
Hazel, J. E. 2(2): 82-83
Healy, J. H. 6(3): 147-152
Hearn, B. C., Jr. 5(8): 509-515

Heath, G. R. 1(4): 181-184
Hebert, A. J. 3(9): 501-504
Hedge, C. E. 3(9): 501-504
Heiken, G. 4(9): 568-572
Hein, J. R. 3(1): 29-33
Hein, J. R. 3(6): 294-296
Heirtzler, J. R. 2(6): 273-274
Helsley, C. E. 2(4): 191-194
Helsley, C. E. 2(4): 195-198
Helsley, C. E. 3(2): 73-76
Helwig, J. 2(7): 309-316
Helwig, J. 3(4): 221-223
Hemleben, C. 4(6): 337-339
Henley, R. W. 4(6): 333-336
Hepburn, J. C. 2(8): 413-415
Hepburn, J. C. 3(3): 153-155
Herd, D. G. 2(12): 603-604
Herd, D. G. 6(12): 721-725
Heropoulos, C. 3(9): 501-504
Herron, E. M. 2(8): 377-380
Hesse, R. 4(9): 529-533
Heusser, C. J. 5(5): 305-308
Heydegger, H. R. 2(1): 22
Hickman, M. H. 6(4): 214-216
Higgins, B. B. 6(3): 147-152
Higgins, M. W. 1(1): 41-43
Higgins, M. W. 2(1): 28
Higgins, M. W. 2(2): 73-76
Higgins, M. W. 4(6): 375-381
Hileman, M. E. 5(8): 500-501
Hill, D. J. 2(2): 93-98
Hill, D. J. 3(1): 2-4
Hill, M. L. 2(11): 535-536
Hill, M. L. 3(3): 155-159
Hillaire-Marcel, C. 6(2): 117-122
Hjort, C. 2(7): 355-358
Hjort, C. 2(11): 522
Hoblitt, R. P. 3(12): 723-726
Hodder, R. W. 6(4): 236-238
Hoffman, J. 2(11): 526
Hoffman, J. 4(1): 16-20
Hofmann, A. W. 6(5): 275-277
Holden, J. C. 4(6): 324-325
Holdren, G. R., Jr. 5(6): 369-372
Hollister, C. D. 2(8): 395-400
Holloway, J. R. 4(4): 198-200
Hopkins, D. M. 3(1): 10
Hopkins, D. M. 4(3): 169-172
Horne, G. S. 6(7): 440-447
Hoskins, D. M. 5(12): 719-723
Hotz, P. E. 5(11): 659-663
Howard, J. D. 5(2): 123-127
Howell, B. F., Jr. 2(1): 28
Howell, D. E. 5(10): 636-640
Howell, D. G. 2(2): 93-98
Howell, D. G. 3(1): 2-4
Howell, D. G. 3(2): 81-83
Howell, D. G. 4(9): 520
Howell, D. G. 4(10): 632-633
Hower, J. 2(11): 526
Hower, J. 4(1): 16-20
Hsu, K. J. 2(5): 213-216
Hsu, K. J. 2(11): 524-526
Hsu, K. J. 3(6): 347-348
Huang, W. L. 3(11): 621-624
Huang, W. L. 4(1): 21-24
Huang, W. L. 4(4): 198-200
Huang, W. L. 4(12): 712, 787-789
Hubert, J. F. 5(5): 302-304
Hudson, J. D. 3(1): 19-22
Hudson, J. H. 4(6): 361-364
Hudson, J. H. 5(1): 21-24
Hudson, J. H. 6(4): 198-199
Hulme, G. 4(5): 269-271
Hurich, C. 6(11): 648-652
Hurley, P. M. 2(7): 343-344
Hurley, P. M. 2(8): 373-376
Hurst, J. M. 4(12): 709-712
Hussong, D. M. 1(1): 11-14
Hussong, D. M. 3(10): 601-604
Hutchison, C. S. 4(7): 407-408
Hyndman, D. W. 3(7): 401-404
Imbrie, J. 2(7): 355-358
Irvine, T. N. 5(5): 273-277
Irving, E. 6(3): 132-135
Irwin, W. P. 3(12): 713-716
Irwin, W. P. 5(9): 557-562
Isacks, B. L. 4(11): 686-692
Isacks, B. L. 5(11): 699-704
Izett, G. A. 1(2): 93-95
Izett, G. A. 1(4): 187-189
Izett, G. A. 4(8): 505-506
Izett, G. A. 4(10): 587-590
Izett, G. A. 4(10): 591-593
Izett, G. A. 5(11): 648-650
Jackson, T. A. 1(4): 163-166
Jacob, A. F. 1(3): 103-106
Jacob, A. F. 2(2): 69
Jacobs, L. L. 6(7): 425-429
James, D. E. 6(3): 174-178
James, N. P. 4(7): 431-436
Jancin, M. D. 5(2): 118-122
Javor, B. J. 4(2): 111-119
John, C. 2(12): 599-602
Johnson, B. R. 5(8): 452-456
Johnson, D. A. 2(8): 395-400
Johnson, D. L. 2(2): 77-78
Johnson, E. H. 1(3): 107-110
Johnson, J. D. 2(1): 11-14
Johnson, J. D. 2(8): 391
Johnson, J. G. 2(1): 25
Johnson, J. G. 2(4): 199-201
Johnson, J. G. 2(10): 479
Johnson, J. G. 3(4): 219-220
Johnson, J. G. 3(5): 228-230
Johnson, J. G. 3(6): 331-334
Johnson, J. G. 4(3): 132,187-191
Johnson, J. G. 4(12): 795-797
Johnson, M. E. 6(11): 661-664
Johnston, M. J. S. 3(2): 63-67
Jones, B. 5(3): 177-179
Jones, C. M. 5(9): 567-570
Jones, D. L. 5(9): 557-562
Jones, J. R. 4(12): 741-744
Jones, L. M. 5(4): 245-247
Jordan, T. H. 4(12): 770-772
Joyodiwiryo, Y. 6(9): 527-531
Jurdy, D. M. 6(8): 469-472
Kafri, U. 1(4): 159-161
Kahle, A. B. 5(12): 713-718
Kahle, C. F. 5(7): 431-432
Kalb, J. E. 2(6): 266
Kalliokoski, J. 2(1): 26-27
Kamen-Kaye, M. 3(3): 100
Kanes, W. H. 2(7): 343-344
Karcz, I. 1(4): 159-161
Karcz, I. 2(6): 289-290
Karig, D. E. 3(4): 221-223
Karig, D. E. 4(11): 693-697
Karig, D. E. 5(4): 233-236
Karig, D. E. 5(11): 664-668
Katz, M. B. 2(5): 237-241
Kauffman, E. G. 2(2): 82-83
Kaufman, S. 6(11): 648-652
Kaula, W. M. 6(6): 377-383
Kaye, C. A. 1(3): 141-144
Kaye, J. M. 2(1): 45-47
Kaye, J. M. 2(6): 281-282
Kean, B. F. 2(4): 175-178
Keany, J. 6(12): 708-712
Keating, B. 3(2): 73-76
Keigwin, L. D., Jr. 6(10): 630-634
Keith, S. B. 6(9): 516-521
Keller, E. A. 3(5): 246-248
Keller, G. H. 5(1): 4-10
Keller, G. R. 4(10): 636-638
Keller, W. D. 6(3): 184-188
Kelley, J. S. 3(9): 524-526
Kelsey, H. M. 6(6): 361-364
Kendal, C. G. St. C. 2(6): 295-296
Kendall, A. C. 2(11): 524-526
Kent, D. V. 5(6): 330-335
Kent, D. V. 5(12): 769-771
Kenyon, N. H. 6(12): 716-720
Kerr, R. S. 4(5): 260-264
Kesel, R. H. 2(9): 461-464
Kesler, S. E. 5(4): 245-247
Kharaka, Y. K. 5(4): 241-244
Khattri, K. 6(11): 685-688
Kidd, J. T. 4(12): 767-769
Kidd, W. S. F. 2(11): 543-546
King, C. A. M. 2(8): 385-388
King, E. R. 6(5): 312-318
King, P. B. 2(1): 24
King, P. B. 3(12): 732-734
King, P. B. 4(4): 196-197
Kirkham, R. M. 5(11): 689-692
Kirkpatrick, S. R. 4(10): 631
Kisslinger, C. 3(2): 57-62
Klein, G. deV. 2(8): 409-412
Klein, G. deV. 3(1): 39-42
Kleinhampl, F. J. 3(5): 265-268
Kleinkopf, M. D. 5(5): 309-312
Kleinkopf, M. D. 5(7): 445-447
Kleist, J. R. 2(10): 501-504
Knoll, A. H. 3(4): 175-177
Koczan, J. 2(3): 117-120
Kofoed, J. W. 5(1): 4-10
Korringa, M. K. 2(3): 139-142
Korringa, M. K. 2(4): 187-190
Kottlowski, F. E. 1(3): 137-140
Kottlowski, F. E. 3(8): 420-421
Kovach, R. L. 3(8): 437-440
Krauspenhar, E. B. 6(1): 8-10
Kuhn, R. 2(5): 213-216
Kuijper, R. P. 6(11): 644-646
Kukla, G. 3(12): 704-707
Kulm, L. D. 1(1): 11-14
Kulm, L. D. 2(12): 607-611
Kuntz, C. S. 4(4): 241-246
Kyle, P. R. 1(3): 135-136
LaBrecque, J. L. 5(6): 330-335
Ladd, J. W. 4(6): 365-368
Lamarre, A. L. 6(4): 236-238
Landing, E. 6(2): 75-78
Lane, H. R. 2(9): 433-436
Langille, G. 2(6): 289-290
Lanphere, M. A. 3(6): 339-341
Lanphere, M. A. 5(11): 659-663
Lantzy, R. J. 5(12): 724-728
Lantzy, R. J. 6(8): 453-454
Lapointe, P. L. 6(3): 132-135
Laravie, J. A. 3(9): 484-486
Larson, E. E. 3(12): 723-726
Larson, J. A. 3(9): 491-492
Larson, R. L. 3(2): 69-71
Larson, R. L. 5(1): 57-60
Laughlin, A. W. 4(10): 617-618
Laughlin, A. W. 5(4): 237-240
Lazor, J. D. 3(5): 269-272
Le Pichon, X. 2(6): 273-274
Le Pichon, X. 6(10): 597-600
Leamon, A. R. 3(3): 111-113
Ledbetter, M. T. 4(5): 303-304
Leenhardt, O. 2(7): 345-350
Lefort, J. P. 5(9): 523-526
Lefort, J. P. 6(9): 522-526
Lefort, J. P. 6(11): 644-646
LeFournier, J. 2(10): 497-498
LeMasurier, W. E. 1(2): 75-80
Lemieux, J. 5(3): 177-179
Lemke, J. L. 6(11): 661-664
LeMone, D. V. 1(3): 137-140
Lenz, A. C. 4(5): 313-317
Lenz, A. C. 4(12): 795-797
Leo, G. W. 2(7): 336-338
Leopold, L. B. 5(7): 429-430
Lessing, P. 3(5): 241-242
Levinton, J. S. 1(4): 157-158
Lewan, M. D. 6(12): 745-748
Lewis, B. T. R. 4(12): 718-722
Lewis, L. A. 2(1): 9-10
Li, Y. H. 4(2): 105-107
Lidz, B. H. 4(6): 361-364
Lidz, B. H. 5(1): 21-24
Lidz, B. H. 6(4): 198-199
Lindholm, R. C. 6(6): 365-368
Lindsay, E. H. 6(7): 425-429
Lindsay, J. F. 3(9): 533-536
Lingbloom, K. L. 1(1): 31-32
Lins, T. W. 3(7): 357
Lloyd, J. J. 1(4): 152
Lock, B. E. 6(5): 260
Lock, D. E. 3(5): 283-285
Long, D. G. F. 6(10): 626-629
Long, L. T. 1(2): 87-88
Longley, W. L. 4(5): 260-264
Lonsdale, P. 2(8): 395-400
Lonsdale, P. 5(3): 147-152
Love, A. H. 4(2): 81-84
Lovejoy, E. M. P. 6(9): 572-575
Lowell, J. D. 2(6): 275-278
Lowell, J. D. 2(12): 570-571
Lowell, R. P. 1(2): 87-88
Lowell, R. P. 6(5): 299-300
Lowrie, A. 6(7): 434-436
Lowrie, W. 4(11): 698-701
Lundell, L. L. 3(9): 493-497
Lundgren, L. 4(11): 657-660
Lutz, T. M. 6(3): 179-183
Luyendyk, B. P. 3(4): 211-215
Luyendyk, B. P. 4(6): 369-370
Luyendyk, B. P. 5(9): 578-579
Lyle, M. 4(12): 733-736
Lynn, W. S. 4(12): 718-722
Lyon, G. L. 1(3): 135-136
Lyons, P. C. 4(7): 425-426
Mabarak, C. D. 4(8): 467-469
Mabey, D. R. 4(1): 53-55
Mabey, D. R. 4(7): 437-438
Macdonald, K. C. 3(4): 211-215
Macdonald, K. C. 4(6): 369-370
Macdonald, K. C. 4(10): 631
MacDonald, W. D. 6(7): 440-447
MacGregor, I. D. 2(3): 151-152
Macintyre, I. G. 5(12): 749-754
Mackenzie, F. T. 5(12): 724-728
Mackenzie, F. T. 6(8): 453-454
Maddock, T., III 6(5): 297-298
Maldonado, A. 5(2): 111-117
Malfait, B. T. 2(7): 317-320
Malpas, J. 1(1): 45-47
Malpas, J. 4(4): 233-236
Mancini, E. A. 6(7): 437-439
Mankinen, E. A. 6(11): 653-656
Mannion, L. E. 2(10): 496
Mantura, A. J. 5(3): 191
Mao, H. K. 2(9): 429-432
Mao, N. 3(2): 91-94
Mara, S. J. 5(8): 504
Mark, D. M. 2(2): 101-104
Mark, D. M. 2(5): 235-236
Mark, R. K. 5(8): 464-466
Markl, R. G. 5(10): 625-630
Marshak, R. S. 5(4): 233-236
Marshall, N. F. 5(5): 297-301
Martin, K. 4(2): 120-122
Marvin, R. F. 2(6): 283-285
Mathewson, C. C. 2(11): 539-542
Mathewson, C. C. 3(11): 627-629
Mathewson, C. C. 4(5): 260-264
Mathewson, C. C. 5(1): 61-63
Matthews, J. V., Jr. 4(3): 169-172

Matthews, R. K. 5(1): 16-20
Matthews, V., III 3(3): 155-159
Matti, J. C. 2(12): 575-577
Mattinson, J. M. 3(4): 181-183
Mattinson, J. M. 3(8): 479
Mattinson, J. M. 4(7): 393-394
Mattis, A. F. 4(6): 325-326
Mauk, F. J. 4(3): 177-180
Mauk, F. J. 4(11): 703
Max, M. D. 3(4): 206-210
Maxwell, J. C. 4(12): 789-794
Maxwell, T. A. 1(1): 9-10
Mayer, L. A. 6(1): 11-15
McBirney, A. R. 2(12): 585-589
McBride, E. F. 4(6): 327-332
McCaffrey, R. 6(9): 527-531
McCallum, M. E. 4(8): 467-469
McCulloch, C. M. 3(12): 687-690
McDonald, R. C. 2(9): 461-464
McDowell, F. W. 3(12): 691-694
McElhinny, M. W. 4(8): 455-457
McEwen, T. J. 5(4): 249-252
McGinnis, L. D. 2(6): 291-294
McGinnis, L. D. 2(10): 517-519
McHone, J. F. 4(7): 391-392
McHone, J. F. 5(5): 262-263
McIntyre, D. B. 4(9): 573-575
McIntyre, D. B. 5(6): 324-325
McKee, E. H. 2(3): 139-142
McKee, E. H. 5(9): 576-578
McKenna, M. C. 2(2): 83-84
McKenzie, G. D. 6(8): 499-502
McKinney, F. K. 5(8): 467-470
McKirdy, D. M. 2(12): 591-595
Mclelwain, T. A. 6(1): 61-63
McLoughlin, P. A. 5(5): 297-301
McSaveney, E. R. 2(6): 281-282
Means, L. D. 2(1): 15-16
Mears, A. I. 3(9): 521-523
Mehnert, H. H. 2(6): 283-285
Melchior, J. 5(7): 405-408
Mercer, J. H. 5(10): 600-604
Merriam, D. F. 3(3): 100
Merrill, G. K. 3(12): 721-722
Merschat, W. R. 3(1): 2-4
Meyerhoff, A. A. 6(7): 440-447
Miall, A. D. 4(10): 635-636
Mickelson, D. M. 3(10): 587-590
Mikkelsen, N. 6(9): 553-555
Milici, R. C. 3(3): 111-113
Miller, C. F. 5(11): 685-688
Miller, G. H. 2(3): 125-130
Miller, G. H. 4(8): 502-504
Miller, H. G. 6(9): 522-526
Miller, R. H. 4(12): 795-797
Miller, T. P. 5(3): 173-176
Millhollen, G. L. 3(4): 164-168
Milliman, J. D. 3(8): 461-462
Mills, H. H. 4(7): 401-406
Mills, H. H. 4(9): 516-518
Milsom, J. 3(3): 117-120
Milsom, J. 5(10): 641-643
Mioduszewska, B. 5(8): 498-499
Mitchell, J. G. 4(3): 133-136
Mitchell, W. S. 3(7): 407-410
Mitterer, R. M. 2(9): 425-428
Mixon, R. B. 5(7): 437-440
Moeri, E. 1(3): 127
Moerner, N. A. 6(1): 41-45
Molfino, B. 5(7): 400-404
Molina-Cruz, A. 5(2): 81-84
Molnar, P. 5(4): 212-216
Molnar, P. 5(8): 461-463
Moody, J. B. 5(8): 502-503
Moore, G. F. 3(4): 221-223
Moore, G. F. 4(11): 693-697
Moore, G. W. 1(3): 99-100
Moore, J. C. 3(9): 530-532
Moore, J. C. 6(4): 199
Moore, J. C. 6(4): 209-213
Moore, J. G. 2(9): 437-440
Moore, J. G. 6(4): 205-208
Moore, T. C., Jr. 1(1): 11-14
Moore, T. C., Jr. 2(2): 87-92
Moore, T. C., Jr. 2(12): 607-611
Moorman, M. A. 1(2): 65-68
Moorman, M. A. 2(4): 202-203
Moran, J. M. 3(12): 695-696
Moran, J. M. 4(4): 197-198
Moran, J. M. 6(3): 136
Morgan, P. 6(7): 392-396
Morisawa, M. 2(8): 385-388
Morley, J. J. 6(5): 309-311
Morner, N. A. 3(3): 109-110
Morris, W. A. 5(2): 85-88
Morris, W. A. 5(3): 137-140
Morris, W. A. 6(1): 4-5
Morris, W. A. 6(3): 132-135
Morton, R. A. 4(5): 277-280
Morton, R. A. 4(10): 633-635
Morton, R. A. 5(1): 61-63
Mose, D. 3(9): 537-540
Mountjoy, E. W. 4(2): 111-119
Moussa, M. T. 4(6): 326, 382
Mudie, J. D. 3(4): 211-215
Mudrey, M. G., Jr. 2(6): 291-294
Muehlberger, W. R. 3(5): 232-235
Muehlberger, W. R. 6(6): 337-340
Muessig, K. W. 6(3): 143-146
Murphy, M. A. 2(12): 575-577
Murray, D. P. 6(11): 694-698
Murthy, V. R. 5(6): 365-368
Myers, J. S. 4(5): 265-268
Myers, P. B., Jr. 2(11): 561-564
Mysen, B. O. 4(4): 198-200
Naeser, C. W. 1(2): 93-95
Naeser, C. W. 1(4): 187-189
Naeser, C. W. 2(12): 603-604
Naeser, C. W. 4(8): 505-506
Naeser, C. W. 4(10): 587-590
Naeser, C. W. 4(10): 591-593
Naeser, C. W. 5(11): 648-650
Nairn, A. E. M. 2(7): 343-344
Nakagawa, H. 3(12): 704-707
Nakata, J. K. 4(11): 644-648
Naldrett, A. J. 5(10): 590-594
Naslund, H. R. 2(12): 585-589
Nassichuk, W. W. 3(5): 273-278
Neal, D. W. 6(8): 493-494
Neathery, T. L. 4(6): 375-381
Neathery, T. L. 4(12): 767-769
Neev, D. 3(12): 683-686
Neill, W. M. 4(8): 495-498
Nelson, H. 5(3): 141-146
Nesbitt, R. W. 6(11): 689-693
Neumann, A. C. 5(1): 4-10
Neumann, A. C. 6(1): 5-8
Newell, W. L. 5(7): 437-440
Nicholls, I. A. 3(1): 11-14
Nicholls, I. A. 5(9): 571-575
Nichols, D. J. 6(7): 430-433
Nichols, J. 5(9): 578-579
Nielson Pike, J. E. 3(8): 467-470
Nilsen, T. H. 2(10): 483-485
Nilsen, T. H. 3(4): 217-218
Nisbet, E. G. 5(2): 68-71
Nitecki, M. H. 6(11): 661-664
Noble, D. C. 2(3): 139-142
Noble, D. C. 2(4): 187-190
Noble, D. C. 3(9): 501-504
Noble, D. C. 5(9): 576-578
Normark, W. R. 2(1): 11-14
Normark, W. R. 2(8): 391
Normark, W. R. 4(11): 681-685
Norris, R. J. 4(6): 333-336
Novak, I. D. 2(12): 572
Nur, A. 2(5): 217-221
Nur, A. 3(8): 437-440
Nur, A. 4(8): 463-466
Nur, A. 4(11): 661-664
O'Connor, B. J. 6(11): 681-684
Odegard, M. E. 3(10): 601-604
Oldale, R. N. 6(1): 56-60
Oliver, J. 4(10): 583-586
Oliver, J. 6(11): 648-652
Olson, E. R. 6(9): 556-559
Otis, R. M. 2(9): 451-455
Otto, E. P. 1(1): 9-10
Otton, J. K. 2(2): 53-54
Oyarzun M., R. 3(10): 595-596
Padgham, W. A. 5(7): 395
Palacas, J. G. 4(2): 81-84
Palacios M., C. 3(10): 595-596
Palacios M., C. 5(10): 600-604
Palmer, A. R. 4(12): 773-774
Palmer, A. R. 6(11): 694-698
Park, J. K. 6(3): 132-135
Parry, W. T. 2(11): 559-560
Parsley, R. M. 3(1): 2-4
Patrulius, D. 2(8): 392-393
Patton, P. C. 3(2): 88-89
Patton, P. C. 6(9): 567-571
Pawlowicz, E. F. 5(7): 431-432
Peach, P. A. 3(1): 43-46
Pekarek, A. H. 2(6): 283-285
Pekarek, A. K. 5(9): 563-566
Peled, U. 1(4): 159-161
Peltier, W. R. 4(2): 73-75
Perfit, M. R. 5(2): 105-110
Perrie, L. A. 3(1): 43-46
Perry, A. O. 4(4): 241-246
Pessagno, E. A., Jr. 1(4): 153-156
Pessagno, E. A., Jr. 3(2): 73-76
Pessagno, E. A., Jr. 5(9): 557-562
Peterson, D. L. 5(7): 445-447
Peterson, D. O. 5(11): 655-658
Pettitt, R. A. 5(4): 237-240
Phelps, D. W. 5(1): 52-56
Phillips, J. 2(1): 28
Phillips, J. D. 2(9): 437-440
Phillips, R. P. 2(8): 391
Phillips, W. E. A. 4(8): 499-501
Picard, M. D. 1(1): 9-10
Picard, M. D. 2(3): 121-124
Pierce, S. T. 3(8): 433-436
Pike, R. J. 5(5): 262-263
Pinkerton, H. 4(5): 269-271
Piper, D. J. W. 1(1): 19-22
Piper, D. P. 3(11): 627-629
Pitman, W. C., III. 2(8): 377-380
Pitrat, C. W. 3(5): 228-230
Plafker, G. 3(2): 68
Plafker, G. 6(3): 170-173
Platt, J. P. 2(2): 93-98
Platt, J. P. 3(1): 2-4
Platt, J. P. 6(8): 453-454
Pohn, H. A. 2(11): 547-550
Pollack, H. N. 5(5): 265-268
Porter, S. C. 3(3): 101-104
Potter, E. C. 3(6): 331-334
Potter, E. C. 4(3): 132,187-191
Potter, E. C. 4(12): 795-797
Powell, B. N. 5(1): 52-56
Powell, C. M. 3(12): 727-731
Powell, C. M. 4(7): 390
Powell, C. M. 4(12): 789-794
Powell, T. G. 2(12): 591-595
Powers, D. W. 5(7): 441-444
Pozzi, J. P. 4(8): 455-457
Pratt, R. M. 2(3): 155-159
Price, P. 5(2): 81-84
Price, R. A. 6(5): 267-270
Prince, R. A. 1(1): 11-14
Prince, R. A. 2(12): 607-611
Proko, M. S. 1(4): 185-186
Prowell, D. C. 6(11): 681-684
Pullman, H. W. 6(11): 661-664
Pushkar, P. 3(11): 669-671
Quigley, D. P. 6(3): 136
Quilty, P. G. 5(6): 336-340
Ramberg, I. B. 3(4): 201-205
Rast, N. 4(3): 185-186
Ratcliffe, N. M. 4(1): 56-60
Raymond, L. A. 2(3): 143-146
Raymond, L. A. 3(1): 7-9
Raymond, L. A. 3(6): 294-296
Raymond, L. A. 3(7): 358-359
Rea, D. K. 2(7): 317-320
Rea, D. K. 3(2): 77-80
Reay, A. 2(12): 605-606
Reed, A. 4(5): 260-264
Reeve, S. C. 3(2): 90
Reguant, S. 3(5): 231
Rehmer, J. A. 2(8): 413-415
Rehmer, J. A. 3(3): 153-155
Reichle, M. S. 4(4): 206-210
Reid, A. R. 2(2): 67-68
Reid, A. R. 2(7): 336-338
Reid, A. R. 2(10): 476
Reilinger, R. 4(10): 583-586
Reimnitz, E. 4(7): 395-400
Reimnitz, E. 5(7): 405-408
Reitan, P. H. 2(2): 72
Reiter, M. 6(2): 85-88
Renwick, W. H. 5(6): 361-364
Resig, J. M. 2(12): 607-611
Rhodes, R. C. 3(10): 549-554
Rice, A. 4(1): 61-62
Rice, A. 5(3): 188-190
Rich, E. I. 2(4): 165-169
Riddihough, R. P. 3(4): 206-210
Ridge, J. D. 2(6): 287-288
Riecker, R. E. 3(7): 364-366
Ritchie, A. W. 3(5): 232-235
Roberts, A. A. 4(2): 81-84
Roberts, H. H. 6(7): 405-408
Robertson, A. H. F. 5(6): 373-376
Robinson, R. 3(8): 437-440
Rocha-Campos, A. C. 6(1): 8-10
Rod, E. 2(7): 336-338
Rod, E. 4(7): 390
Rod, E. 4(11): 703
Roeder, D. 4(3): 173-176
Roeder, D. 4(10): 636-638
Roeder, D. 5(4): 203-206
Roeder, P. L. 5(12): 712
Roller, J. C. 6(3): 147-152
Rona, P. A. 2(4): 201-202
Rona, P. A. 4(4): 233-236
Rona, P. A. 6(5): 299-300
Roobol, M. J. 4(9): 521-524
Rooke, J. M. 2(12): 605-606
Rooney, T. P. 3(7): 364-366
Root, S. I. 5(12): 719-723
Roper, P. J. 2(5): 247-250
Rose, W. I., Jr. 5(10): 621-624
Ross, R. J., Jr. 4(8): 505-506
Rouse, L. J., Jr. 6(7): 405-408
Rowan, L. C. 5(12): 713-718
Rowley, P. D. 6(1): 51-55
Rowley, P. D. 6(9): 572-575
Roy, J. L. 6(3): 132-135
Roy, S. D. 6(4): 239-242
Rozanov, A. Yu. 4(12): 773-774
Ruckman, D. W. 2(11): 539-542
Rutter, E. H. 3(8): 477-478
Sabet, M. A. 5(7): 433-436
Saito, T. 2(7): 333-335
Saito, T. 4(5): 305-309
Sales, J. K. 2(10): 496

Salisbury, M. H. 1(2): 63-64
Sando, W. J. 3(11): 657-660
Sando, W. J. 3(11): 661-664
Sandulescu, M. 2(8): 392-393
Savage, D. E. 2(2): 83-84
Savage, J. C. 2(2): 61-66
Savelle, J. 5(3): 177-179
Sawkins, F. J. 4(7): 427-430
Scheidegger, A. E. 4(7): 439-442
Scheidegger, K. F. 1(1): 11-14
Schellinger, D. K. 1(3): 107-110
Scherer, M. 2(10): 499-500
Schlanger, S. O. 3(7): 397-400
Schmidt, P. W. 6(3): 132-135
Schmitt, H. H. 2(2): 55-56
Scholten, R. 6(10): 585-586
Scholz, C. H. 2(11): 551-554
Schonberger, H. 2(10): 474-475
Schreiber, B. C. 5(9): 527-528
Schreiber, E. 5(9): 527-528
Schumm, S. A. 1(1): 37-40
Schumm, S. A. 3(2): 88-89
Schumm, S. A. 5(2): 72-76
Schwab, F. L. 3(9): 487-490
Schwab, F. L. 4(12): 723-727
Schwab, F. L. 6(9): 532-536
Schwartz, M. L. 1(1): 31-32
Schwarzer, T. F. 5(8): 493
Schwarzer, T. F. 5(8): 500-501
Schwebel, D. 3(5): 283-285
Schwietering, J. F. 6(8): 493-494
Scott, K. M. 2(4): 171-174
Scott, K. M. 2(10): 496
Scott, R. B. 4(4): 233-236
Sears, J. W. 6(5): 267-270
Seeger, C. R. 3(3): 155-159
Seeger, C. R. 3(3): 159
Self, S. 1(3): 115-118
Sengor, A. M. C. 4(12): 779-782
Seward-Thompson, B. 2(2): 71
Seyfert, C. K. 5(4): 207-211
Seyfert, C. K. 6(3): 132-135
Shabica, S. V. 4(3): 132,187-191
Shabica, S. V. 4(12): 709-712
Shackleton, N. J. 4(11): 649-652
Shackleton, N. J. 5(7): 400-404
Shackleton, N. J. 6(4): 243-246
Shackleton, N. J. 6(5): 309-311
Shankland, T. J. 3(2): 91-94
Sharman, G. 4(4): 206-210
Sharp, R. V. 6(3): 170-173
Shaver, R. H. 3(5): 269-272
Shea, J. H. 1(1): 3-8
Shearer, C. 6(2): 85-88
Shelley, D. 4(9): 518-520
Shepard, F. P. 4(7): 395-400
Shepard, F. P. 5(5): 297-301
Sheridan, R. E. 2(9): 465-468
Sheridan, R. E. 4(8): 459-462
Shinn, E. A. 4(6): 361-364
Shinn, E. A. 5(1): 21-24
Shinn, E. A. 6(4): 198-199
Shipley, T. H. 3(9): 533-536
Shipley, T. H. 6(10): 635-639
Shive, P. N. 5(9): 563-566
Shreve, R. L. 3(9): 527-529
Shuey, R. T. 1(3): 107-110
Shuey, R. T. 2(9): 451-455
Sigurdsson, H. 6(5): 271-274
Silberman, M. L. 3(9): 501-504
Silver, E. A. 2(3): 147-150
Silver, E. A. 3(3): 155-159
Silver, E. A. 6(4): 199
Silver, E. A. 6(9): 527-531
Simon, R. W. 5(2): 118-122
Simonian, K. O. 5(9): 534-538
Simpson, R. W. 5(10): 585-589
Skehan, J. W. 4(3): 185-186
Skehan, J. W. 6(11): 694-698
Slack, P. B. 3(11): 665-668
Slagle, E. S. 4(4): 254
Sleep, N. H. 6(6): 377-383
Slemmons, D. B. 2(3): 139-142
Sloan, D. 6(5): 305-308
Sloss, L. L. 4(5): 272-276
Sloss, L. L. 5(7): 393-394
Smart, J. 5(12): 755-759
Smewing, J. D. 5(9): 534-538
Smith, A. G. 4(11): 653-656
Smith, A. L. 4(9): 521-524
Smith, A. T. 6(11): 694-698
Smith, I. E. 3(3): 117-120
Smith, R. B. 2(9): 451-455
Smith, R. B. 4(7): 437-438
Smith, R. L. 3(6): 339-341
Smith, R. L. 5(3): 173-176
Smith, S. G. 5(11): 705-707
Smith, S. G. 6(8): 452-453
Smith, T. E. 3(8): 463-466
Smithson, S. B. 3(4): 201-205
Smithson, S. B. 6(11): 648-652
Smosna, R. A. 2(12): 572
Smosna, R. A. 3(5): 241-242
Snyder, W. S. 6(12): 741-744
Soderblom, L. A. 2(5): 231-234
Southard, J. B. 2(8): 395-400
Spall, H. 3(8): 422-424
Sparks, R. S. J. 1(3): 115-118
Sparks, R. S. J. 4(5): 269-271
Sparling, D. R. 3(12): 677-678
Spear, S. G. 3(3): 155-159
Spicer, B. E. 2(9): 461-464
Spiess, F. N. 3(4): 211-215
Spirakis, C. S. 3(7): 372
Sprunt, E. S. 4(8): 463-466
Sprunt, E. S. 5(5): 261-262
Sprunt, E. S. 6(5): 305-308
Stahl, L. 2(3): 117-120
Stanley, D. J. 2(7): 345-350
Stanley, D. J. 5(2): 111-117
Stanley, G. D., Jr. 3(4): 178-180
Stauble, D. K. 5(12): 765-768
Stauffer, P. H. 6(6): 377-383
Steele, W. C. 2(4): 165-169
Steiner, J. 1(2): 89-92
Steiner, J. 2(6): 279-280
Steiner, J. 5(5): 313-318
Steiner, J. 6(6): 377-383
Steiner, M. B. 2(4): 191-194
Steiner, M. B. 2(4): 195-198
Steinker, D. C. 3(7): 360
Steinmetz, R. 4(10): 635-636
Stern, C. 6(8): 464-468
Stern, C. R. 2(5): 227-230
Stevens, C. H. 3(9): 524-526
Stevens, M. A. 1(1): 37-40
Stevens, R. K. 1(1): 45-47
Stevens, R. K. 2(4): 175-178
Stewart, D. C. 3(10): 565-568
Stewart, D. C. 4(1): 9-10
Stewart, J. H. 3(5): 265-268
Stewart, J. H. 4(1): 11-15
Stewart, J. H. 4(6): 325-326
Stieglitz, R. D. 6(3): 136
Stinchcomb, B. L. 2(1): 25
Stoeser, D. B. 3(11): 669-671
Stokes, W. L. 5(11): 655-658
Stone, C. 6(7): 401-404
Straley, P. F. 5(3): 133-136
Stride, A. H. 6(12): 716-720
Strong, D. F. 1(1): 45-47
Strong, D. F. 2(4): 175-178
Stuart, C. J. 2(2): 93-98
Stuart, C. J. 3(1): 2-4
Stuart, C. J. 3(3): 153-155
Stuart, W. D. 3(2): 63-67
Stuckenrath, R. 5(12): 749-754
Stuckey, G. W. 1(3): 141-144
Studlick, J. R. J. 6(8): 499-502
Stupavsky, M. 6(1): 61-63
Sturgul, J. R. 3(4): 169-171
Sturgul, J. R. 4(7): 439-442
Sturgul, J. R. 5(5): 260-261
Suarez, M. 4(4): 211-214
Sugden, D. E. 4(10): 580-582
Sullivan, G. G. 5(5): 297-301
Sun, S. S. 3(6): 297-302
Sun, S. S. 4(10): 625-631
Sun, S. S. 6(11): 689-693
Sundaram, P. N. 4(2): 108-110
Surdam, R. C. 3(9): 493-497
Surdam, R. C. 5(4): 196-198
Surlyk, F. 2(11): 529-534
Sutter, J. F. 2(12): 585-589
Sutter, J. F. 5(4): 245-247
Sutton, K. G. 2(12): 585-589
Suyenaga, W. 6(12): 726-728
Swanson, D. A. 1(2): 83-86
Swanson, D. A. 5(11): 659-663
Swanson, F. J. 3(7): 393-396
Swartz, D. K. 5(8): 505-508
Swift, D. 2(3): 117-120
Swinehart, J. B. 5(11): 648-650
Symons, D. T. A. 3(6): 303-306
Szabo, B. J. 3(8): 457-459
Szabo, B. J. 6(12): 713-715
Talbot, J. L. 2(2): 79-80
Talbot, J. L. 3(7): 401-404
Talwani, P. 5(10): 636-640
Tanner, W. F. 2(2): 105-106
Tanner, W. F. 2(6): 280-281
Tanner, W. F. 4(10): 633-635
Tanner, W. F. 4(12): 797-798
Tapponnier, P. 5(4): 212-216
Tapscott, C. 4(8): 452-454
Tarling, D. H. 4(3): 133-136
Taylor, L. A. 2(1): 5-8
Taylor, L. A. 2(9): 429-432
Taylor, L. H. 6(8): 495-498
Taylor, M. E. 3(10): 559-562
Taylor, M. E. 6(2): 75-78
Teeter, J. W. 3(3): 137-139
Teichert, C. 3(4): 178-180
Teichert, C. 4(4): 200
Telleen, K. E. 5(1): 49-51
Teller, J. T. 3(10): 585-586
Tennyson, M. E. 5(6): 325-329
Theyer, F. 2(10): 487-492
Thierstein, H. R. 5(7): 400-404
Thomas, M. D. 5(3): 169-172
Thomas, M. D. 5(11): 651-653
Thompson, G. A. 5(7): 396-399
Thompson, G. A. 6(2): 111-116
Thompson, J. M. 5(8): 509-515
Thompson, P. H. 5(9): 520-522
Thompson, P. H. 6(8): 454-455
Thompson, P. R. 2(7): 333-335
Thornton, C. P. 3(10): 565-568
Thornton, C. P. 4(1): 9-10
Thunell, R. C. 4(9): 525-528
Tilling, R. I. 2(9): 457-460
Toimil, L. J. 4(7): 395-400
Toimil, L. J. 5(7): 405-408
Torresan, M. E. 6(2): 105-110
Towe, K. M. 4(6): 337-339
Trommsdorff, V. 2(3): 131-132
Troxel, B. W. 2(2): 53-54
Tullis, J. 5(8): 502-503
Turcotte, D. L. 4(3): 181-184
Turcotte, D. L. 5(6): 324-325
Turner, D. L. 2(6): 297-298
Turner, D. L. 3(8): 463-466
Turner, D. L. 5(9): 529-533
Twiss, R. J. 2(7): 329-332
Tysdal, R. G. 5(6): 377-383
U. S. Bureau of Land Management 1
Udintsev, G. B. 4(4): 233-236
Ulrich, G. E. 2(2): 81-82
Valentine, J. W. 2(2): 69-71
Valley, J. W. 6(10): 582-585
Van Alstine, D. R. 6(3): 137-139
Van Andel, T. H. 2(2): 87-92
Van Andel, T. H. 2(10): 507-510
Van Couvering, J. A. 6(3): 169
Van der Voo, R. 4(3): 177-180
Van der Voo, R. 4(11): 703
Van Driel, J. N. 6(10): 592-596
Van Heuklon, T. K. 5(11): 693-695
Van Houten, F. B. 3(4): 194-195
Van Houten, F. H. 4(8): 458
Van Schmus, W. R. 5(1): 45-48
Vance, J. A. 4(5): 301-302
Veevers, J. J. 4(12): 713-717
Veizer, J. 5(3): 177-179
Vernon, R. H. 6(2): 81-84
Verosub, K. L. 5(5): 319
Vidal, P. 6(4): 196-197
Viljoen, M. 3(1): 11-14
Viljoen, R. 3(1): 11-14
Visser, J. N. J. 2(6): 279
Vitek, J. D. 3(4): 217-218
Von der Borch, C. C. 3(5): 283-285
Von Herzen, R. P. 2(7): 327-328
Von Huene, R. 1(1): 19-22
Von Huene, R. 2(3): 147-150
Wachs, D. 3(1): 29-33
Wachs, D. 3(6): 294-296
Wadge, G. 6(8): 503-506
Wahrhaftig, C. 3(8): 463-466
Walker, D. 5(7): 425-428
Walker, D. 5(12): 712
Walker, G. P. L. 1(3): 115-118
Walker, G. P. L. 5(12): 729-732
Walker, G. P. L. 6(5): 260
Walker, G. W. 3(5): 265-268
Walker, R. L. 5(4): 245-247
Wallace, R. C. 2(12): 605-606
Wallace, R. H., Jr. 5(4): 241-244
Wang, C. S. 4(7): 388-389
Wang, C. Y. 4(2): 108-110
Ward, W. C. 1(4): 171-174
Ward, W. C. 6(12): 713-715
Wardlaw, B. 5(11): 655-658
Warme, J. E. 2(6): 295-296
Warner, M. A. 6(7): 430-433
Watkins, J. S. 4(6): 365-368
Watkins, J. S. 6(10): 635-639
Watkins, N. D. 4(1): 10
Watkins, R. 1(2): 55-60
Watt, J. P. 3(2): 91-94
Watts, N. L. 6(11): 699-703
Watts, W. A. 3(6): 344-346
Weand, B. L. 2(8): 389-390
Weaver, C. E. 3(8): 425-428
Weaver, F. M. 2(10): 511-515
Weber, F. R. 3(8): 463-466
Weber, J. N. 2(3): 153-154
Weidie, A. E. 6(12): 713-715
Weiler, Y. 2(7): 345-350
Welday, E. E. 2(10): 493-495
Wenk, H. R. 6(8): 507-511
Wesson, R. L. 3(8): 437-440
West, F. G. 4(10): 617-618
West, F. G. 5(4): 237-240
Whelan, P. 2(12): 605-606
Whetten, J. T. 4(5): 301-302
White, C. M. 2(12): 585-589
White, S. E. 2(7): 326
Whitford, D. J. 5(9): 571-575
Whitten, E. H. T. 4(4): 237-240
Wickham, J. S. 4(3): 173-176
Wickham, J. S. 4(10): 636-638
Wilcox, J. D. 5(11): 655-658

Wilcox, R. E. 1(2): 93-95
Wilcox, R. E. 1(4): 187-189
Williams, D. L. 2(7): 327-328
Williams, E. G. 1(3): 112
Williams, G. E. 6(1): 4-5
Williams, H. 3(8): 479
Williams, H. 4(1): 7-8
Williams, K. L. 2(1): 5-8
Williams, P. F. 2(1): 15-16
Williams, P. L. 6(1): 51-55
Williams, P. L. 6(9): 572-575
Williams, S. J. 3(10): 597-600
Williamson, E. A. 4(6): 340-344
Wilshire, H. G. 3(8): 467-470
Wilshire, H. G. 4(11): 644-648
Wilson, H. H. 6(7): 440-447
Wilson, J. L. 5(11): 696-698
Wilson, R. C. 1(1): 9-10
Wilson, R. C. 2(3): 121-124
Wind, F. H. 6(3): 140-142
Winder, C. G. 2(6): 299-300
Wingate, F. H. 6(7): 437-439
Winker, C. D. 5(2): 123-127
Winkler, E. M. 5(3): 188-190
Winkler, G. R. 5(6): 377-383
Winn, R. D., Jr. 5(1): 41-44
Winterer, E. L. 3(5): 279-282
Wipperman, L. K. 3(10): 601-604
Wise, S. W. 6(3): 140-142
Womack, W. R. 5(2): 72-76
Woodcock, N. H. 4(11): 653-656
Woodcock, N. H. 5(6): 373-376
Woodford, A. O. 4(9): 573-575
Woodford, A. O. 5(6): 324-325
Woodruff, C. M., Jr. 4(5): 260-264
Woodside, J. M. 6(7): 392-396
Woodward, L. A. 2(12): 570-571
Woodward, L. A. 3(3): 114-116
Woodward, L. A. 3(7): 357
Woodward, L. A. 5(5): 269-272
Worzel, J. L. 3(9): 533-536
Worzel, J. L. 4(6): 365-368
Wright, J. V. 5(12): 729-732
Wright, J. V. 6(5): 260
Wright, L. 4(8): 489-494
Wright, L. 5(7): 388-392
Wright, L. A. 2(2): 53-54
Wright, R. H. 2(10): 483-485
Wright, R. H. 3(4): 217-218
Wright, T. L. 6(1): 16-20
Wu, F. T. 1(4): 159-161
Wyllie, P. J. 3(11): 621-624
Wyllie, P. J. 4(1): 21-24
Wyllie, P. J. 4(4): 198-200
Wyllie, P. J. 4(12): 712, 787-789
Wynn, J. C. 5(5): 309-312
Wyss, M. 6(11): 685-688
Yeats, R. S. 6(8): 456-460
Young, R. A. 6(5): 301-304
Yuan, J. 2(11): 561-564
Zawislak, R. L. 5(9): 563-566
Zietz, I. 1(1): 41-43
Zietz, I. 2(1): 28
Zietz, I. 2(2): 73-76
Zietz, I. 3(6): 329-330
Zietz, I. 4(6): 375-381
Zietz, I. 6(5): 312-318
Zoback, M. D. 6(3): 147-152
Zoback, M. L. 6(2): 111-116
Zohdy, A. A. R. 4(3): 137-140